

aatcctcagc tctgtctcca agatgactgc tttgccctca gtatcttcag cttctgggtc 240
 cggggctgga tcaatctcaa tgatggctctg cccatcctct gaggtgcttt caacagcctg 300
 aattgccgag gttaggccgg actccatggc caccaattcc acagggctaa ccatggtggt 360
 catgttgccc agtgtactcc catcctgcat ggtagtagag ctcagcagcg ccaagctaga 420
 tgaagggtgg atggtcattg tgtctgggtga gctgctcttg gcagaagaga ccactgtggc 480
 ataacggaaa aactnaagg ncaaaaagca tgtgtggaca ggccaggatg gancctggtt 540
 aaggtggccc tnggaattg nccctngnaa a 571

<210> 5657

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5657

aaggcagggt cttactctgn ctcccagccc ggagtgcagt agtgcaatct tagctcattg 60
 cagttttgac ctcccaggct caaataatcc tcccgcctca gcctcctaag tagctgagac 120
 tacagctgtg cgccacgaca tctagctaata tatttgtttt ttgtagagat gaggtctcac 180
 tgtgttgctc aggctgggta ggtgtctaac tcctaggctc aagtgatcct cccacctcag 240
 cctcccaaag tgctgggatt acagggtgtga gtcaccgtgc ctggctttgt ttaaggcatt 300
 ctttttccgc agcatctgtt accagcagcc tgaagccatt tctataacaa tatcaggaag 360
 acacatggac agagacccta atgtatgaaa aatgcatcaa ttatttgaga ttaatgagtc 420
 ctcataaaca gagactgaga ggctctaaact ttcctncgtt atgtgaagag taagaacnag 480
 acacttctcc tgtcctttgg aanggtgtta tgcatctaag ggattaaatt gcaacaatgg 540
 ctttaanacg gaggggggaa aacattgggc nt 572

<210> 5658

<211> 577

<212> DNA

<213> Homo sapiens

<400> 5658

```
gtggcattca ttcctctgaa taactgtttc tttaaaacaa acaaacttgc attttagctt 60
caagggtaca tgtgcaggtt tgttatatag ataaactcat gtcacggggg tttgctgtac 120
agattattta ttcatcaca caggtactaa ggctagtac caatagttat tttttccgat 180
cctctccctc cttccaacct ccaccaact ctgtttctga aagaaggaaa gaaagaaaga 240
aagaaagaaa gaaagaaaga aagaaagaaa gaaagaaaga aagaaagaaa gaaagggcc 300
agagaggaca aagtatttgt ctaaggccat actgttatta agaggtagaa ccaagaccta 360
cactaactct gcaaatccaa tttctgtcca cagtgccctt gagatcagaa tgatactcac 420
tccatttctc taaaagctac aaatgaaact cttcttatga gtaaaaagta ctaacccaaa 480
ttggattatt actatagtgg tctcgcaaaa ttagaggga tgttcanagg gcaaagattg 540
agaaccctgg cttaatcttg tangggtgaa tgnctnt 577
```

<210> 5659

<211> 530

<212> DNA

<213> Homo sapiens

<400> 5659

```
gtagggacag ggtctcactc tgttgccagg gctggctctg aactactggg ctcaagcagt 60
cttcctgcct caacctccca aagtgtctggg attacaggca catgccactg tacccaaccc 120
aggttcatgt ttttatagtt cattttgatt tttcattttc catccctgat ctttagagaa 180
tttctgttca tgcagctctg tcaccccttt gcttgggtca gtctgactct gtcttcacca 240
gttattatct tggaagcttg agacagtttc cttatctgaa cttgcaggtc gcagaccttt 300
gagtttgggt tgcttggcag taggtggcaa gttacttaac ttggccatgc ctgatgctat 360
ggtctgaatg tttcccccaa attcatgtgt tggagactta atccccaatg caacagtatt 420
gagaggtggg gagtttggct cttttttgcc ctctggctt ttgccatgtg agggcaccgt 480
gntcttcttt ttcagaggat gcnnctctt nggggnantt ttggganaaa 530
```

<210> 5660

<211> 573

<212> DNA

<213> Homo sapiens

<400> 5660

```

aacaaaatgg cccctaaaca aacaccaaca acttcacttg gtcttcaaac aaagaaacag   60
tctttttttc caacatagga ggaaaagcta cttgttgtgg atgtacaggt ttccaacatg  120
gcacccttct aaagggtctt caaggatcat cctaatagcc cattttacct atgtactgac  180
cttggaagct aacccttgag tatgatgcaa ctccactcta atgtaaatta aaatgccatg  240
atcttaaaaa tgccataata ttgtcagtat aatttaattt ccagtttagt tccatcttca  300
catttagcag tgtgtgtctg tggccgtctc ctggtgccag catttcagaa tgtactatca  360
ctggctgaga aaatctcacg gtgagaagag tagtgtgtca taagatctga acaaaaaagc  420
taccaaagtc gatcagtctc agtatgattc anggatatga ttttcaatta gcaaatgggtg  480
ccactgaagc anaaagtggc tttgttttgc tacaccagn gctnccagga atttcctgng  540
gcctcctttc atgggtttnt accctggcag gtt                                     573

```

<210> 5661

<211> 575

<212> DNA

<213> Homo sapiens

<400> 5661

```

aaaggcatgt caaaaagaca ttttacttcc ccaaagcatg gcccgaagaa gccattatta   60
taatagagta tgaatttctg ctgcaggtta ttagcctata atactaaca taaagtccctg  120
cttaggacat aaaggcttac actgggacat gaagtagtaa gacacaatcc actgactatt  180
ttaaatttgc tgtacaccta aaccatcttc tccattatac caatctctgt gtgtgtgtgt  240
gtgtgtgtgt gtgtgtatac acacgtcctc tttcagtaga acataaactc tgaagatgag  300
gtaaaataca atacagctgc tgctgctgat gagctgtctg agtttctgca gacaatctgc  360

```

aaaaaaatgg aagttctcaa ggcccagttg ctggtgtctc ttttgaggcc ccaaaacttg 420
gttgatttat cttattggca ctctgcatga aatcaagagt aggctcaaag gcaagcctta 480
tctcctgnga acacaattcc tacaggtctn aactcaatat ttaaatttng ttgggacctg 540
gntncaaatt ggaacttctt aaangatttt aaaag 575

<210> 5662

<211> 483

<212> DNA

<213> Homo sapiens

<400> 5662

aaatagagac agggctctcac tgtgttggcc acgttggtct tgaactctgn cttgtttggt 60
tgttttgttt ttgttttttg agatgggggc tcactctgtt acccaagctg cagtgcagtg 120
gcgtgtcctc agctgggctg caacctctgc ctcccgggtt caagcgactg tcccatccag 180
cctcccgagt acctgggact acaggtgcag gccaccacac ccggctaatt ttgtttattt 240
ttggaagana tggggtttctg ccatattgcc caggctgggc tnaaactcct gacctcaagt 300
gatcctccca cctnggcctc ccaaagtgt tagaccacag gcccaagcca tnatgctggc 360
ccanagtagc tttcaataaa ctctntttgc actgtacttt negactcgnc ttgaattcct 420
tcctgtatga gatccaagaa ctcttttggg atctgatcan gaantnttt cccagnatat 480
aag 483

<210> 5663

<211> 586

<212> DNA

<213> Homo sapiens

<400> 5663

agacttttat tttatttta cttgtttgga cagaaaagaa aattcatcag ctttcattag 60
agtctcctta agtgttggaa acacattaaa ctcaggaata gtggacctg tagaaaagca 120

tcacaaatta aaaatatatt tctccatgtg gtaaaagtgc tttcaatccc attaaagggc 180
 acagcaaggg tgtttggaaa cacgatctga aatttggcct gcaatccgtg gcatcgattc 240
 caaccacagg gcgggggagt caccatgata tagagcacag gagccacgtg gggcccggag 300
 catgcggaca gcaacactcg caataactga gtgaggacga ggcccatagc ctgagtagaa 360
 tagattctgt atttgtaaaa aatgaggtgg ttacatcaac tgggttgaag ggggactggg 420
 taatcccaga aattccttgt ttctggctcg tggggatggt cagatctgcc caccactctt 480
 ggcacccgan gcttncctgg agacgcatna acctgggntg ggaaagtgcc canatcttgc 540
 tgggggaaca caaccttcgt tgccatgccg gcacccagcc tttcnt 586

<210> 5664

<211> 587

<212> DNA

<213> Homo sapiens

<400> 5664

gtttactatg cttttattta tactatttgc acagtgagca tatttacaaa tgtgttccat 60
 tacaagacat cagacacaag ggaaagacag aacaaatctg taatcttctt ccactcacac 120
 ttctactggtt attccaaact ttcaaagaac agcctctcag tgggtactttc tatccatcac 180
 acaacatgac acaaagactt catttaataa ggtagcaca gctgttaata tcaaagtcca 240
 acgacagaaa aaaataacat aaacttttcc tcaagtatat atttaaacad attgtgattc 300
 ttagtcaaca gtgttataaa atgaatacaa gataacaata tctatagcaa aactactttt 360
 gcagtttaac aattagcact ggtcacaaat accaaatata gtgccctccc caccctccac 420
 aaccttttga attcaggacc ctgcctatct actccatgga gcagatcttt ggattctctt 480
 ttccactcct aagggtttgc ctaggatctc tctatggngc agaatacccc ctagcaccgc 540
 aattggggaa taggcttaac cttgnatnat catctgaatc ccagcat 587

<210> 5665

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5665

```

gagatggaat ttctttcttg tcgcccaggc tagagtgcaa tggcgtgatc ttggatcact 60
gcaacctctg cctccccgagt agctgggatt acaggtgccc gccaccacgc ctggctaatt 120
tttgtatttt aagtagagac ggggtttcac catgttggcc aggctggctt tgaattcctg 180
acctcaagtg atccactgng ctcgccaga attatgtaga atttctaatt gaacaaaagg 240
aatatctgtg agaaagaatc caagctgtct gcaattgcta ttatattaca tataataaca 300
actgcaacag ggggattcca gctgtatgtg ttcaggttaa ctgtgtcaag acattccaac 360
acatattcat tcattctaac gtatgacaaa aacgctagca gatcaagtat gtatgcctat 420
ggagggaccc tgggatacat agcantgctg agcatcctta aaaangtttt tctaactgga 480
gccattggtc tttgggnca acangtntg acatcccttg gggcaccttc cccttgactt 540
tttnaaaagg ncccaancta cttttaaaga nc 572

```

<210> 5666

<211> 586

<212> DNA

<213> Homo sapiens

<400> 5666

```

agtaaaatgc ctactaatgc caaattcatc ctccattata tctttcaata gcttgtattt 60
aataagctta tgtgatgatt ccttcaggct tatggggaaa aaaaatgtct gcaaattaag 120
ttacatgctt cgccctccgc cccctgcccc aatcaaaaat gatacaacca agttttggtc 180
tctctgtcag atgccaagag aattcttggc aagttttggt tcaaatgcag ctttccctcaa 240
catccaatca tttctccctg ctctgacacc tgtccctctt ttctcagctt ggagtttttg 300
tttcagaatt gtcttatccc tatgatacat ccatttgtac ttctatatcc cactttaggt 360
aattaggttt tagagccac aggaatcaca attcacatgc tgttgctaag ttctgtgcca 420
ttaagccaaa attgctatct accaaagtat ttaagtcctt atgaagagta ttccaagggt 480
ttcatgcaat gtganggtcc attgcaaata ttttgaactg agtttggaca aagagttttna 540

```

agngggaacn cagattttcc ccaaggnggg aaaggaaggg cagggt

586

<210> 5667

<211> 530

<212> DNA

<213> Homo sapiens

<400> 5667

catctttaaa ttaatgtctt tactaaaggg ttagaatgat ttcagaagga aattacaatt 60
 ttgaagggaaggaa aggaaaagac attgaaatta caggtttcag aagaagagct tcctctgact 120
 ccagcttttg ctctcctgcc ttgggatccc caaccacccc ccaagcaccc ttgtatgcat 180
 tcctcaggaa gagggatgtt gttctcagtg ttttcctctt ccatccgngc ctcaaactag 240
 gcagcttcca atggtgccct gggcttcana aggtggccac tgagctgacc tctaggcttg 300
 caggctgaat ttctcgtcag cacttcagga tcatgatctc taacactcat cttctctctg 360
 cacactcagg gttgggggtgc agccccagct gaggtcccag ggncagtggg tggatgtggg 420
 ggcaagggag ctggaanaac actngagaga cagcaggtaa attgagacat ggctttattn 480
 agcagccctt ttanagggtt aagggtacca ttttctnntt cacaaaccct 530

<210> 5668

<211> 470

<212> DNA

<213> Homo sapiens

<400> 5668

aaagaaaaac aacagaagag aaggctgac ccaagctaca gggttttttt gtttgtttgt 60
 ttgtttgttt gttttggaga cagtctcgt ctgtctccca ggctggagtg cantggngcg 120
 gncatagctc actnggggct cagactcaag ctcaagcaat cttcttatct tgcctttcta 180
 attgctggga ttataagcat gagccactgc acctggcctg tgngacgtaa ttctgatgtc 240
 aactccctga tgttacatca aatgccacag gttaaggcca ccagcccccg ntaggctgcc 300

ctcgcttcag atgcagctgc aagcttgggt gtccacagac cgnatgtact tttcaccaac 360
 tggctgcaaa tttggagggtt cccaccacgt cctcaggttt gataattcac catacaaccc 420
 acagaactct gaaaagcatg anctttcnnt ttcnntatit gagacannag 470

<210> 5669

<211> 586

<212> DNA

<213> Homo sapiens

<400> 5669

gagtaatgat atggtttaga tctgtatccc cacccaaate tcatgtttaa ttgtaatccc 60
 caatgtggga ggtggggcct ggtgcaaggn gactggacca cgcaggtagt tntcatgaa 120
 tgatttagca ctgtccccct actgctgtct cgtgatagag ttctcatgag atttggttgc 180
 ataaaaagtg tgtagcacct cccctctctc ttttctcttt gctctagccc tgtgaagata 240
 cctgctctgg ctttgccttt tgccatgagt aaaagctccc tgagacctcc ccagtcatac 300
 ttctgtaca gccatggaa ccatgagcca attaaacctt tnttctttat aagttaccca 360
 gtctcaggca tttctttata gcagtgtgag attgaaccga tacaagacaa caataacaaa 420
 aagtagataa atatgaaggc ccgagaaatg gcaacttctt acgaaggga agctgttata 480
 ctcaagcaag tcaagttgag ggactatcct gggagctatt tttccgngcc ttggttttca 540
 cttataccgg gaagtatgcc cntggnggnt taaagttggt ttantt 586

<210> 5670

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5670

ggcttgtgct tatagaggac ttcatcagca cacttcactt gaaatgcacc tggctgcagg 60
 taaccatggt agtaaagaat atcctttctt ccaggctacc gcttagtggt aattccgaaa 120

aatcaggttt gtgaaaattc agatggccta tgggtgagct gtcactcagt tgccaaactg 180
 ncttaatctt cttttgacca ctatataatt ccactctcca tttctgtggc ttctcacttt 240
 gatataagtt ctttacagca gttggtctga ctggcagctg aaaaatgtgt tgctcatcaa 300
 gaggattttg tttgtaatac tttatgcaga tctgtgttaa agaaaagagg agttcatggt 360
 gagatttaat gaaaggcatg caactgacta atatttctag aatatggggg agtttttga 420
 cacgataaac ctgttcttgn atatctactg atggagcant gaagtattcc aaatgattca 480
 aagatcaagg tcttggncta tgaaaaacct ggtaaacct tncittaagtn ggccaaacca 540
 tttccaaagc cnttgaccgg aatngccccc ng 572

<210> 5671

<211> 492

<212> DNA

<213> Homo sapiens

<400> 5671

gagacagggt ctcactttat tgcctagact ggagtgcagt ggcatgatct cggcccactg 60
 caacctctgc tttccaggtt caagcaatgc tctgcctca gcctcccaag tagctgagac 120
 cacaggcaca tgccactaca cctggctaata tttgttagag atggggtttc accatgttgc 180
 ccaggctggt cttgaactcc tgagctcaag tgaccactc acctcggcct cccaaagtgc 240
 tgggattata agcgtgaacc accatgcctg gccaagtaat ccattttttt ttttttttt 300
 tttttgagat ggagtntcgc tctgtcacc aggtgggagc gcaatggcgg catttcggct 360
 cactgcaagc tccgttccg ggttcacgcc attctcctgc ctcagcctcc caagtatgnt 420
 gggactacag gngcccngca ntacgcccgg ntaatttttg gatttttagg ananacgggg 480
 tttcacggtt ta 492

<210> 5672

<211> 604

<212> DNA

<213> Homo sapiens

<400> 5672

```

ggttaattac cccaatgttt tattaacat ctatagaccc atgagggaca gcaaatttga 60
ttaggcttct gtattcaaat ccattttcat gctgctgatt catacctgag gctgggaaga 120
aaaaaagggt taattggact tacagttcca catggctggg gaggcctcag aattatggcg 180
ggaggcaaaa ggcacttatt acatggcggg ggcaagagaa aatgaggaag cagcaaaagc 240
agaaactcct gataaaccca tcagagcttg tgagacttat tcactatcac gagaatagca 300
cggaagagac tggctgccat gattcaatta cctccccctg ggtctctccc acaatacatg 360
tgaattcttg gagatataat tcgagttgag atttgggtga ggacacaccc aaaccatata 420
acaccctgc gccctccgaa tttcatgtcc tcccatttca aaaccaatcg gccttcccaa 480
cagtcttcca aagtcttact catttcagca ttaacttaaa aggtccacag acccaaggtt 540
tatctgagac aaggcaggct tttcaccta atgggcctgg aaatcnaaag ccagctngtt 600
cntn 604

```

<210> 5673

<211> 614

<212> DNA

<213> Homo sapiens

<400> 5673

```

aaaaaagtat gagtgtacag tggagtgttc cagaggttac atgggtgtgct aaccacaaca 60
gtctgacgta gatctgagaa tcttctatta aaccaggcat taaaagatt tgcaaaaatg 120
caagatgtca ctcttatcat ctatgttaac atgtaatgga tttatttttt gtttttgga 180
aaaaaaacca agagaaaaga aaataaagtc atctttagtt tccttaaatt caaagtctga 240
gcctgaaaat ggaagtatca aagctgatgg ttatacgtca gtgagaaaaa aatttaaacc 300
aagctgggtg ggtctttaca tgagataaac tatctacagg aaagaatgac cactaacttc 360
tgcataataa atgagagtgg atcttttaat tctgagatgg caatgtactt tacaaggacc 420
atttacagac tacatcaaac ctttttctag ataaaaaacg tacttcagta acttgcctga 480
attgagagag ccaaaccagt ccggagagga aaacttaaaa tgtttccaca ttatcaagcc 540

```

cccttnagaa gtcctggggg ncctnggcc ctcntttga ccanaggtcc ggttggcaca 600
gtccancngg tttt 614

<210> 5674

<211> 601

<212> DNA

<213> Homo sapiens

<400> 5674

cgaggtggag tttcactctt cttgccagg ctagagtga atggtgcaat cctggctcac 60
tgcaacctcc acctcctggg ttcaagtga tctcctgcct tagcctccca agtagctggg 120
attacaggcc cgtgccacaa tgcctggcta atttttgtat ttttagtaga gatggggttt 180
tgccacgttg tccaggctag tctcgaactc ctgaactcag gtgatccgcc tgcctcagcc 240
tcccaaaatg ctgagattac aggcgtaagc caccgtgtct gaccattttt attattattt 300
atctgcatat tcaaggaaaa aaatataaat tttagattcc tctggctcat aataggcttt 360
cttgaagaga aaaatgacgt gcaagaaata actggagcca ttaaaatata ttttattttt 420
ccttattttgt agttattaac agaaaaaatg ctctaattag tacctaattg aagttgcaga 480
tgtgattatc aagttgaaat gaatatattac tcaaacctgt aaagggttn gcttttctgg 540
caatatttaa tgaaggatgc cattagcatt ttaacttaca ttctttcatt aaggtccang 600
g 601

<210> 5675

<211> 533

<212> DNA

<213> Homo sapiens

<400> 5675

aacccaaaac aacactaaac tttaatggca tactgtagat ctgccaaaat gaggcaaag 60
cagaacataa tgacggatc acaaaaatac atttttaaat ggtcaattta gaaagggtac 120

ttttgtataa aggttcagta aatcatttga caagtatttt taaacagtaa attttgtaaa 180
 gtgtgaagtc tatggaaatg tcaacacaag gcacattagg ttctgaatga ccacaaaagt 240
 ttaaaattag ctaaaaaggg aaaataaata ggttttaag tgnaaatgca gtaagttctg 300
 tatgttcaact atttactttc ttagttttca ttccttctac tgtaatgtta tgataatgtg 360
 agatctacat cagaattggg agggaaaaaca gcttctctct tctgtcacct caacaaaaga 420
 tactttaaat ctgtactgtc taatacagta gccactaggg acatgtagct atngagtact 480
 tgaaatatgg ctagtgcacat atgataanac ttgactatac tgggtgaann nnn 533

<210> 5676

<211> 608

<212> DNA

<213> Homo sapiens

<400> 5676

aacagtttca ttgaaataga attcacatac catacaattc acccatttaa agtgtacaat 60
 tcagtggttt ttagtatatt cacagatatg tgcaatcatc actacagtca attttagagc 120
 attttcatta cctcggaaag aaactctgta cccttttagct attccccctgc ccacccatgc 180
 tcccaccctc agctttaaac agccagtaat ctactttctg tctgcataga tttccatatt 240
 ccattcattt gaatgcaatc atataacata tgggtctttg tgactagctt ccttcactta 300
 acataatgat ttcaggatcc attcatgttg cagcatgtat cagtacttca ttcttttata 360
 taccataata taccattata tggataccat attttacttt tgcatgtgtc agttgatgga 420
 catttgggtt gtttccacct tttgggtgatt ctgaataatg cttctgtaaa caaatgtgta 480
 caagtttctg tgtggacata tggtttcatt tctcttgggg atatacctaa gtannagaat 540
 tggttgggnc ataaaagtaa cctngatggg taatcacttg gnggacctgg ccanatngtt 600
 ttccaaag 608

<210> 5677

<211> 610

<212> DNA

<213> Homo sapiens

<400> 5677

```

acctttaagt gaggacaatg gcacttaata aataggactg ttgtgaaaat taaatgagta 60
gatacatata aagcagtcag aacagagcct ggcacacaat aagtacaatg tatgtgttaa 120
ctagttgcaa tagtggaact ggaagactag tagtaggtag catatcaagt tgtataaaac 180
cttgagccaa atatgggaat ctcataataa accttcatag agttatcatt cttagcctct 240
ataatacact catggctaata gtaatgcaca gaaaatcaag ctaaacaac tcaataattt 300
cacagcaagt aggtatatct attttacttc tgggatagag tgaatggttg aatcagcata 360
actccacagt ttttaattga agaattttac cattaatggc cactggaaca ggacactgac 420
tatacttttc agctaattgg atgggctcca gagaccacac tggatgttgc acaaacaact 480
ggatgtgtgn tttgggcatc attaaaataa aagttacat ggtaaatacg gcagaaaatc 540
ttgcattgga aggagctttg ncagcatttg cagcttggac attttatggc agcagaccag 600
ttggtaacng 610

```

<210> 5678

<211> 602

<212> DNA

<213> Homo sapiens

<400> 5678

```

agacggagtc atgctctgtc acccaggctg gagtgcagt gtgcattgca acctccgcct 60
cctgggttca agcgattctc ctgcctcagc ctcccgagta cctgggacta caggtgcgtg 120
ccaccatgcc cggctaattt ttttatattt ttagtagaga tggggtttca ccgtgttagt 180
caggatggta tggatctcct gacctcgtga tccacctgcc tcagcctccc aaagtgctgg 240
gattacaggc gtgagccatg gcacccggcc cacagattct gcttttaagt gcagaagtat 300
tttaacaatg ggagacggaa taaacgggtc ttacctactt ctttcccttc ttaaagcatg 360
tactctaaag cagaggggtc ctttagtgat gaatccagat gctgctgtca tcacccca 420
taacagaaac tggcaacagg gagccctggg cagctgcaag tgacacccac tcctgncccc 480

```

tcagactcaa tggncctagg agctctgcaa tacattggct tactatacct tcctttctta 540
 ttggccaata naagtttcct naticccaaa tnttaaactt ttccaacttg gacttttatt 600
 ac 602

<210> 5679

<211> 605

<212> DNA

<213> Homo sapiens

<400> 5679

atttgagata gagtcttgct ctgtcgccca ggctggaatg cagtggcgcc atcttggtc 60
 actgcaatct ccgcctctca ggttcaagtg attttcctgc ctcagcctcc cgagtagctg 120
 ggactacagg catctgccac caagcccgtt aatttttgta taaaatacaa aaattttaag 180
 tataaaatac ttaaaaagta gagacgggat ttcacatgt tggccaggat tgtcttgatc 240
 tcttggcctc gtgatctgcc cgcctcagcc tcccaaagtg ctgggattac aggcatgagc 300
 caccgtgctc ggccgacctg gggctctttc ctaagagaaa agtccacacc gaggcagacc 360
 tgcacagccc ccagcacagg gaaacggcag caagtgtgtg tgaaggcagg aatggcgctg 420
 ggatgccctg ccatggaacc gctggctcac agcagactca cgcttggtgg cagtgcttgc 480
 gacggacggg actttgacgt ggctcaaggc aagttcttnt caantncaag aaggaaaagg 540
 actttccggc aaggggccat naccggacaa tggttggctt ggatgggatg ncctgaggag 600
 gcatg 605

<210> 5680

<211> 357

<212> DNA

<213> Homo sapiens

<400> 5680

ctccagtgcc agaaatgac aatgatgaag tgggggttgg gcagctagct ggctggagag 60

gtgagccaaa ggaacccagg agtggacacc tgagggagtg gggctctcaga ggaactgggc 120
 agagctaaat gggctaagtc ttaagaggca ggggcaggaa atgtaatgga ggctttctac 180
 tctacaacgt ccaatcctgc tggggagggc atggagtatt tcagagtagg aaagaatgag 240
 ggagaggata gtcacgataa atcaangttt cattcttttc ctcctctttc ttagctcgnc 300
 aaancctacn ctttctctcc agctggaatt atggtggtga ntgagggagg taaacnn 357

<210> 5681

<211> 596

<212> DNA

<213> Homo sapiens

<400> 5681

ggacatctca gatgtgactc ttgctgccag gctagaattt aggctatgtg ataattctca 60
 gctgtcctac aatgcctgct tcttgaaaga agtcggcact ttctagaata gctaaataac 120
 ctgggcttat tttaaagaac tatttgtagc tcagattggt tttcctatgg ctaaaataag 180
 tgcttcttgt gaaaattaaa taaaacagtt aattcaaagc cttgatatat gttaccacta 240
 acaatcatac taaatatatt ttgaagtaca aagtttgaca tgctctagaa tgacaacca 300
 aatgtgtctt acaaaacacg ttcctaacaa ggtatgcttt acactacca tgcagaaact 360
 gggtttgttt tcctctctaa aaaacaggat gtgtcaaat gataaatatt ctaagattaa 420
 agtggcaatg ctcagattcc caatcttacc agntctggga ttcactctgg cctcctagaa 480
 gactgagggg aatatgctgg acttacatgg ccatggaacc ttccttcttc tagaaacca 540
 agcggtatgc ngaatcatfa tgcncacatt cccgcnggaa aaaagggttg accctn 596

<210> 5682

<211> 598

<212> DNA

<213> Homo sapiens

<400> 5682

agaaaatagc ttatgttaca acaaaaaccc tataaaaaca ttcattcccag caaaagcctc 60
 cagggtctga ggggtgagggg aaaagtttca aagcacgtgg atagtccaga tctgggatgc 120
 cctgtcctca tccggctccc atagcaccac gtgggtcccg tcgtagcccc ggcctccctt 180
 cacgtccagg atctggcctt cgaacatctg gctgcagatg tggcccgatt cactgatgct 240
 ccacgtctgg cgcggcaggc ggctctcggc ccacagcacc ggggcccttc acgacctccc 300
 tctgggtaaa ggggaggaca gggacatttt cagagtcttg aacaaactta ttccttgggg 360
 acgatggagc agaaagacct cctgggctgg ggacatcctt ccttcttgta gtggatggag 420
 cangaagttg tccagggact gncacatgct cgcttctnac catgggcagg acggtggcaa 480
 caaggggggc cacggggcgg ctttttttaa ggggcagaac aaggggagtg aanccggggc 540
 ccgggtgaag nggcaccaca ggttgttttc anggggaagt taggcccga angggcct 598

<210> 5683

<211> 588

<212> DNA

<213> Homo sapiens

<400> 5683

gatgcatgag gataaacatt cttggaagga cgcgtgtgtt ctgtgatatg tcttgattgg 60
 ctgggcggtc aggattgcgt atggttttgt cattgcatgc ttttgtcttg tgtgtgactg 120
 agtgaaaata tggatgatgt gtgggcaatg gtgtctgtgc agagtcccct cataggaggg 180
 acatcagagc agccccctc caccagtggc tgccccagca cctcaggaa gctgtttctt 240
 gggggaagat gcagaaagaa atgaagtctg ggtacatgtg tacttggcag gcaagaggag 300
 agattcaaca accccagaga gaccaggaca aaacaggctg gtgacaaggg acacctctc 360
 acccagctag agagaggccc tgggatacga gcaaagaggt tgcagngtct anatgatttc 420
 aagggtcng tttaccaa atgttgcttg aaaccagcct gagtgcctnt cttgccccaa 480
 aaggagatc tcantgaana cttnggtnc caagccagg cctcaagctt aatttaaagc 540
 ccccccttc ttccaccacc agcccaannc aggaccttc ttcncca 588

<210> 5684

<211> 585

<212> DNA

<213> Homo sapiens

<400> 5684

```

gaagttingat aacaaagaaa tatatataag acaaaaatag acaagagtta acaataaaaa   60
cacaactatc tgttgacata acatatggaa actttttgtc anaaagctac atcttcttaa  120
tctgattgtc caaatcatta aaatatggat gattcagngc cattttgcca gaaattcggt  180
nggctggatc atagattaac attttctggg agaaaaaaga aaaagagata tttatttagg  240
aaataaacca ttttttaca aaatctccat aaaacctcaa cttttctaca ataaaccaa  300
actaatactt tcagngaata tctattaaat gagcatttcc attagtttaa cacacaaang  360
tctcctcccc tacatttcac tcttgaggtc tagaataact tactctgtaa atcatagata  420
ttctcaataa cctctttttg ttatcaatta cggtagact caagcatcca gaaatagctt  480
taaactggga cccaaatnln ggaaggangg ctagttaata tattacattg ggaataaacg  540
ggccccctgg gttattacac cattcttgga aaggcattaa cttgg                    585

```

<210> 5685

<211> 602

<212> DNA

<213> Homo sapiens

<400> 5685

```

ctcacttctc ttggaattac tgtatacctt tttatgattc cattttatct ccttggttgg  60
ttattagctc taactctatt gcggccccctg tgtgaacttt aaggaatatt ccctttcctt  120
ctctggcctc agatagtttt ctcacacata tgcactaacc agtacttagt taaacactag  180
ggtaggacct cctggagata gccagagtgt tctctctgtg cagctttctt ctttctggta  240
atctgccttg caaacccaaa ccaactgtggc ctcttcagat tccaggtctg gctccccagt  300
tcagaggacc tccagaatat gcctgggctg ctctcctgg ggctggtatc tggaaattgt  360
ctccaggcaa ccacactact cctcttattt gtttctatct tttgggaatc actgtcctgt  420

```

gttgccctggt gtccaatgcc ttccaaacag tttttcttta aatatatttn ggtcattttt 480
 tttttcaatt gggncatgtg angggggtaa ataaatcgag gcccctttac ttaatcttgg 540
 gccngaagaa gaaangagga agtctcctgg ggcnttttaa cncctctttg aaacccaact 600
 tt 602

<210> 5686

<211> 597

<212> DNA

<213> Homo sapiens

<400> 5686

aaaaattcat attgacttta ttgactgctg aagttcagtc tcattcatct tccagccttc 60
 tctgatactg tctttctgag gcttttctac ggtagacatc atagaaggtc tcctggccca 120
 cgcgcacttt aatcatgata cactccatcg ttcttcccag gacaaaaaag aagggcagga 180
 accggtagat gccaaatcgc tgctccttct gaacttgaa acagaatcgg ctccctattt 240
 ttaaagctgc actagattcg gtaagctcca gatacagctg caaatcaaga gccatcaatt 300
 tgtatgatgg tctctcctga gtctaacagg tcccacagcg catggcaaaa gggcagattt 360
 tacgggtggc agatctagga agtggagctg gaaacgagaa tgtgcagctc actctccctg 420
 ttcgggaacg ggatgtgtgt gtatcaagt acgtccaagg cataggggag ccagcgacgg 480
 gtggcctcgt gtgcagaata naataacat ttagcataga tctgtttcag ggcttttttag 540
 gggaccattg gnganattta cccttgaatt aggcnttatt ttaaaaaaat cattggt 597

<210> 5687

<211> 596

<212> DNA

<213> Homo sapiens

<400> 5687

gccttttggg atgcctggta attttttctt ggtagctgga catgatgtac caggtaaaag 60

gaacttttat aaatcagctt ttagcaatgt agcagttagg tgggggaaag gggaggggag 120
 acattctatc atcctatgat taagtctcag tcttttagta agcatatgcc tctggtgtac 180
 aaacttctaa gtgtttcctc agtattcttc tcccctcttt ggtaggacag gatggctaga 240
 gttgtctgga gtttagtatt tcccttctct gatgcagaag gttagagctg acaagagtta 300
 ggtattttccc ttccttggg tcaggctcta ataatacccc agcaggttag gatttagcta 360
 actaatttct cctgggggca gaccttgta agaagagcac agtgctctgg catatttcaa 420
 aatggttcat ttcaccttcc ccctgccaga acacataggg attttctgc aatatttact 480
 tggagaatct aattgagctc atgtaggtta gctaacaaaa atgggggggt tncccatgaa 540
 gngggtcctc ctggaggta aaactttcaa agtggtcata ctgaacctcc tataan 596

<210> 5688

<211> 585

<212> DNA

<213> Homo sapiens

<400> 5688

gttttgtttt gttttgcttt tttttttttt tactttaata gaataaggaa aagaaaagct 60
 atttatcatt ttttttctct taattttctt ctccccattc taagcagcta gacaggtctc 120
 tgngctatatt tttctttcag tggatgattg cgctttaaaa cagaaaacag agcttacttg 180
 tacacaactt cccttcctgg cttctttcag tcctatgaca atgtcatgga gtgaggaata 240
 cgctatgtat gtcacaggag aaggagagaga agctaattgt ttttaaggag ataggcagga 300
 gcagtagaca aagcaagact agagcggttg tccagagcca gttctcccat ggaggcaggt 360
 ggtagtacct ctggaagaag tgtggaaagc tggcttcac cccagggaat attactagaa 420
 catttctgga gagaggaata ggcagtagaa ccactgaact gcaaaggaat ctgnggactt 480
 ggaaaataaa gtgaacttct ggttttctta accaaacttt atagcatgga ttaagnctg 540
 ngcaagttaa cttcgggaaa attaaaatca ctttaagagg taagn 585

<210> 5689

<211> 586

<212> DNA

<213> Homo sapiens

<400> 5689

```

agtttactcc cagtccttga attaatcttct gccccagcat taagcagaat cttaatgata 60
ttaacatatc ctccagacgc agctagactc agtggtgtat aatcagatac gttcctatgt 120
tctttatttg cacctcgagc cagcagcaag tctaccacct cctgacgtcc accagaacat 180
gccaatgaaa gcggagtatc cttagtctgt tcagactgtg cttctatatc tccaccttta 240
tccaaaagga tttcaacaac tccaacatgc cctgctgttg ctgccaggat tagtggtgtg 300
aaaccttttt tgtctctgtg ttcaattttg gcatcccgtg caatgagcac agatacaagt 360
tcttcatgac cacctgcaca agctagtgtt aatgctgtgt catgattgct ctcaagtatg 420
tgcatcaatg tcaactgaag gatacacagg aggcatcgat tgggaagcca cattgnttgt 480
agctgcgaac aggattcaag gtggaaagac ctttggggtc tgagaagaac tggttggaac 540
caggggcact ttggnactta caggtgntat caggcattaa gagngg 586

```

<210> 5690

<211> 371

<212> DNA

<213> Homo sapiens

<400> 5690

```

gagacggagt ttcgctctgt cgcccaggct ggagtgcagg ggngcgatct cggctcactg 60
caagctctgc ctcccgggtt cagccattc tcctgcctna gcctcccng tagctgggac 120
tacaggecg caccaccatg cccggctaatt ttngaattt ttagtanaga cggaggttgc 180
aangagctga natcgggcca ctgcactcca acctggatca cagagaanac tgnctcaaaa 240
aacaacaaaa aaaccaggna tgctgaatag caagtatgta ggtatccact gaagtactcc 300
naanattttt tcaaagatga gcatgatttt attatagaca atttaaaaat atngncangc 360
gngnataaan g 371

```


<210> 5691

<211> 588

<212> DNA

<213> Homo sapiens

<400> 5691

```

ataatgccat acagatattt taatgctcac aagttatttt tcgacggaga tcaacattac   60
attaacttga atttagtttc attattaaat tatgaaacaa gatacagata aatcttataa  120
gcagagtict gattacttaa cacagtgaag ttgcaattcc aagttacaga gacattcaca  180
taaagatatt cttgagctac taaataatgg ctaaatactg atgacaataa gaattaatac  240
tttccactta tgacatttgt caataacaac tctgattagg taaaaaataa ttaacatgat  300
ggatcatatta taattctaaa taaatacatt attatgtttg ccacaggagt aggtgtgtat  360
gcgtgtgtgg gtatatgtgc atgtgtgtgt attcagatgg tactgaactc aagttggctt  420
ttaaaaagga agagatcagg catattactg tgcaattatg ttatcagagt gatttatgta  480
atgctatgat gtcaaataaa acctagagtc tagtcaatta gagtaagccg agtcntgaat  540
ctggtgaggc tgggtgggca tgggaaaagg gntacctnta ccaaaacc                588

```

<210> 5692

<211> 585

<212> DNA

<213> Homo sapiens

<400> 5692

```

gaatttaaag ttacaagcat ttaatggttt aatcaagcat gtagttttta ccagtataca   60
aaatgagact tagtacaaaa cggctcttcaa ctgtcacgtc agttgttcct ggagtgtttt  120
atggggaaaa gcaaacttca ccaaacatag agtaccaaca ttcaagtgtc cttttccaca  180
agtttctgat ttcaactta ggagagaaga acagcattta ataactgcat cccttgcata  240
tgggatgtat gacaggctat acctgcaaga aatattcaag catgttgaat cttcatctga  300
atgatggttt tcctttatgc caaaaggcca tgtctaacct tataataaat acagcagcat  360

```

gagactgtac agtgggttctc aaagtgtgac cccgaccagc agtgagagca tcctctggga 420
 acttggttaa aatgtaaatt attaggtcct accttaaacc tcctaaatca caagcttgct 480
 ttaacaagca acctgcactt taaaacaaac tctctaggtg atctgggtgca tgctaaagtt 540
 tgagcttctt ataataaaat tгнаactnn ccncaactgg gtaat 585

<210> 5693

<211> 590

<212> DNA

<213> Homo sapiens

<400> 5693

gttgggattt cagatagagt ttgggtttata aaaagcaaac agggccaacg tccacaccaa 60
 attcttgatc aggaccacca atgtcatagg gtgcaatatc tacaataggt agtctcacag 120
 ccttgcgtgt tcgatattca aagactgttt tgctccattc cccagtgtgt ttctgtaaaa 180
 aaggacaaaa tgtacatgat catgacatta caattactta gacaactctg acttaacaag 240
 ttaaagaaaa cctttttact ctaaagaagc attcatcgtg ccatgttatt attcatgtat 300
 atgagacctg ctctacttca aagctgtaat cttcttagtt gataaacaat attcttaaac 360
 aaatgccttg taaggattct tagtaaatgc agcagggcaa ttgctataga ccagtgcac 420
 ctcaggaggc ctggttccgg ccattgctaa cagggtttata aatgggttat taaaaagagg 480
 ataggtctct cacaatgaaa ttcgctaata ttagaagtga gttttncctt tgggtccaaat 540
 aaccataacc aaatggagag aattggaagg ttaccntta aaattttaaa 590

<210> 5694

<211> 584

<212> DNA

<213> Homo sapiens

<400> 5694

agtagagatg gggttttgcc atgttggcca ggctgggtctc aaactcctga cctcaagtgc 60

tccgcctgcc tcagcctccc aaagtgctgg gattacaggt gtgagctacc acacctggct 120
aatttacgcc aacattttac aaccctttca aagcatttgc tattgaaaga aggcattcag 180
tggcaaaatt ctgacattcc agtaaataatt actaccctaaa gaaaagaaaa ttcttaattt 240
caagatcaaa gtgccaatgc ttttcttttc taaataagag taaagaaaaa gaaggccctt 300
attacatctc tagcaaataa ctctatctcc aaagacttag gtaagaaatt acaattcttc 360
agaaaaatat tctggcactg tttaaatata tactagtttt ctaatccaaa aggttaacac 420
tttcaaagag ggcactatta ttcaattaaa gntactgntt ctcaggaatt tgagaagata 480
tatctttttt tttttttttt tcaatttata gcangaaaaa agctgggggtt anccccaaga 540
atacggctta cnttcnccaa aagnaaattg gggccagaaa ngna 584

<210> 5695

<211> 578

<212> DNA

<213> Homo sapiens

<400> 5695

acgacttttg caggagtgtt ttgaaggagg aggttcttga ctacaaaggg tgcttccaac 60
tggggtcact atagttaaaa cataccaagg ggaatacttt caggcacttg ataaaatgat 120
gaatgggctt ggaatggaat gaggccagat ggtagttatg ggaggggggc gccatggagg 180
gctggggact ggggaaagt ttaagtggcg ggatcctcag gctcggactg tactgaaag 240
aacctccctg ggaagcgctg gaaaatggga accgcagtcc tcctgcaatg ggacagaatt 300
tttctcaaat gcattgtctc acctgcattt cttcatagt caccgatgaa tcgtttggtg 360
aggaaccgga ccaccagtgc tgcacgtcag aaaaaagaac gtcaaagtgt taaccttgga 420
agttagattg ttctccacce caccctctgc ctggaaaaca gttctcccaa agaaagccat 480
agatggcccc aagtgaatt cctaccctgt acttcntgcc cttcttttca gacaaaagga 540
ggggctagaa ggcacggga atatggcttt ggccactg 578

<210> 5696

<211> 544

<212> DNA

<213> Homo sapiens

<400> 5696.

```

cttgttacat gtatctcctt gtactctgcc tttcttttt ttgttgtttt gttttgtttt 60
gtttctgaga tagtctcgct ctgtcaccca ggctggagtg cagtggcgcg atctcagctc 120
accacaacct ccacctcctg ggttcaagca agtctcgtgc ctcagcctcc tgagtagctg 180
ggattacagg cgtgcactac catgcccggc taattttttt attttttagta gagacagggt 240
ttcgcccttgt tggccaggct ggtcttgaac tcctgacctc aagtgatcca cctgcctcag 300
ccccccaaag tgctgggatt acaggtgtga ggcaccataa cctacctaag ttcttttttag 360
aataaggtaa ggggtagagg gtggaagagt ggatggatgg atggacggca gatgggcgga 420
tggacagatg ggtggatgga ggaatggatg gacagacaga caaagggact gaagctgnac 480
caagcctttc anttcaccta accgggactg agctcaaaca aaggccacca nngacncana 540
ancc 544

```

<210> 5697

<211> 566

<212> DNA

<213> Homo sapiens

<400> 5697

```

gtgtgaacaa gccttcattg tgcaggcgtg agcccaacaa acaaacaaac accaggtctg 60
cgctggccga agacgaagcg tcctccctgg aggtgggaac aagtcacctc tgaccacacc 120
tcctctgacg ccatcacctc ctcttgccc caccgaaggg ctgacacaa gcccgaaggt 180
cggggggaga ggggcggggc ggaaccgagg gcggaggcca aggtgggatt ccaggaaggc 240
cttccgaagg atggaggtgg gtcctgtccc tccaggtagc ttgtgggtgt ggacagcagg 300
acttgctggc tcagtgtggg cacaaggaca ctgtgccact ggttgagtga gtggtgaggg 360
attggaggtg gctcccagag gcctccatct gcatggccct ggccctgtgg ctccagcagg 420
ctgccctggc tgtgggtagc ccaggagcca catgcgctta ntggggccgc ttctggggca 480

```

agggcttttna caggaaagca tgagccactg agcccgtgg gganggccan gncaggccgg 540
gagcttnggg tgcaattttt tcctgn 566

<210> 5698

<211> 499

<212> DNA

<213> Homo sapiens

<400> 5698

aaaaaaagat atatggcatt actttggtct ccaaaacagt tgccagtttg aactttattc 60
tgccagcaag tatttggttt ggctcagcag ggctcaagtt gaaaaatat ttgccattc 120
caaaaagatt taacgagctt tgctgcaaat gctggtgcca tttggcacat cacagggact 180
gtggcacagc aaagagaact ctctcaacca cagattttat ttgcccaagg tagccagcac 240
tgggagctca gttgattcct cgggtcaaga agctgcaagt caaatgcgtg aagtttccaa 300
gagaaagtga ccaaacgagg catgagaaaa ctcttgctga cattgaaaag gaagtcactg 360
ggctctgactc caccctgcac aggaatttga tggctaactt tcagaactgn caacaacatn 420
cttacaccaa cnttagatc caggctctaa aggtgcaggc agcagaccng attnatctcc 480
acntntagca cagctattc 499

<210> 5699

<211> 601

<212> DNA

<213> Homo sapiens

<400> 5699

ggataaggct gtgctttatt acatgcataa ttacaaatct gatttctcta atttattctc 60
tgaagtagca ccttaacact ggctcatctg tctaaaatca agaacaaagc ctagaagaaa 120
cacaaaagca aacttgagac accctcctta tcgctactgc actatgaaat atgaccaaac 180
ctttcattgn cattaaatac cagaaatagt aacattttct gttttgcaaa ctttagtggg 240

gaaggacaac taataagaca ggtattggac cagaaatgta cagataagaa ctttgatttc 300
 tacacaatat acagggtagt caagccaaat agtctcatat gaaggaatca gtgacatgga 360
 aaggacaaaa tatgtggta ctgagccatt actatgatnc acatacccca gaaaggattt 420
 tttctttttt attaaaatgc tanaggngga ctattccan ggggaaactn ttgcgctggc 480
 ttgattantt taaaggataa aataaaataa ncccttgggt anccaagttt gggccaaaaa 540
 aagaagtica gantttggaa ggaccagact ntgggtaaaa ccgtctaaaa tcagggtccc 600
 c 601

<210> 5700

<211> 602

<212> DNA

<213> Homo sapiens

<400> 5700

gagatggacc cttgctctct agcccaggct ggagtgcagt ggcgcattct cggctcacca 60
 caacctctgc cttgtgggtt caagcaattc tcctgcctca gcctcacgag tagctgggat 120
 tacaggcacc cgccgccatg cccggctaata ttttgcattt ttagtagaga tgggattttg 180
 ccatgtttggc caggctggtc tcaaactcct aacctcaggt gatccacccg cctcggcctc 240
 ccaaagtcct gggattagag gcgtgagcca ctgtgcccag ccatgaatgg attttgatat 300
 ggacagatgt gtgtcctgga agatgtgctc taatgagggg agtgagccaa gcatgaggag 360
 gacacgaaag ccagaaaaca gagattcaac cggaaggaa tggggaattc caaagatgac 420
 cccaaangga agnccnaggc attagctncc aangggccta agaaagcaac taggccc aaa 480
 tggaagaag gttggatacc taaaaaatgg gactggaaca tcttttacct ggtgggactg 540
 gcccnngngg aaagcaatac tganggcttt tgggaaaggg ggnaaggccc nccccaaana 600
 aa 602

<210> 5701

<211> 600

<212> DNA

<213> Homo sapiens

<400> 5701

```

agagatggtg gtctcaccat gttgccagg ctggtctcaa actcctggga tcaagcaatc 60
ctcccacctc agcttcccaa attgctggga ttataggcat aagccaccaa ggctggctgt 120
gaacaatatt aaacaaaaat tatttctgt ggtaacagag attacatcct atgggacagg 180
gagacaggca gcagactgat aaattaatac aagatctgtc tgatggtgat aaatattgtg 240
caggaaaaaa aacgaaggaa gaggataaga aacattgaag gactaaagga acggtcacia 300
agaagaaaac atttcagaaa agaactgagt aaggaatgaa gaagctgagt tctgaaagtg 360
tctgcagaaa ggcttttcag tagaagtttc agaaagtgt aagggcctaa gataggaaag 420
ggtctaattg atgagcactg gcctacgaag gatgtgtggc catcagcatt agccntccc 480
aaaatcaaat ttaaggagaa ttagacttta ntttaaattt tgcaaccaca ccacaagcat 540
cacaagggtt tggaatggg taagctgata ccaattagta ttgnaactat naatctgctt 600

```

<210> 5702

<211> 474

<212> DNA

<213> Homo sapiens

<400> 5702

```

gaactgtnc aagagttattt attttctctt aatctcaaag ctatttttag taatacaaaa 60
aagccatatt aacatttttt tccgttagaa aacatgatgt acaaaacttt ggatgaaaag 120
atacgtcaaa ttctatttaa tcaattggag gaaaatccac caactccatc aataccaccc 180
aaagngtttt aggcagngaa taaaatcaaa ataatgcac ttaataaatt ccagctgtta 240
aaagaacaaa cttagcaata tataacagtt tgctaacagg atttttgact attcactttg 300
ggagttattt ttaaaaatcc acttttttac tgagtcttac tacataccag gcactgtact 360
tgggccatct anggtaacta agaaaaccgt tgggtaagat nggaangacc cttaaatacag 420
cccttnggtt nccaaattca attttnacct ttnaacatcc tccaggatca gnaa 474

```

<210> 5703

<211> 576

<212> DNA

<213> Homo sapiens

<400> 5703

```

gagatggagt ttcgttcttg tcaccaggc tggagtgcag tgggtgatc tcggctcact   60
acaacctcca cctcctgggt tcaagcgatt ttcctgcctc agcctcccca gtagctggga  120
taacaggctc ttgccacagg gccagctaa tttctgtatt tttagtagag acggggtttc  180
accatgttgg ccaggctggg cttgaactcc tgacctcagg tgatccaccc accttcacct  240
cccaaagtgc tgggattaca ggcatgagcc actgggcccc gcctaaatag tatatatatt  300
taaataatcct ttcagaaaag gccgcttata cagaactatt ctgaagacag taaagaactg  360
ctgaagagga agaaaaaact ggctgtgcaa tagcagaacc tcctccgaac caaagcctct  420
ggagaagaac cagntgcagt ggaggcntta ctcacccatg ttaaaagcac cggaaccgat  480
taanaatccc aagcttggcn aggantggaa cttggaaaag ggnccttagg ngcctttgga  540
actacccccn ttaatttacc ggtggaatgg aacccg                               576

```

<210> 5704

<211> 584

<212> DNA

<213> Homo sapiens

<400> 5704

```

ggtaaagaaa agtgctgttt tttatttgtt cttgaatgta taggttcttt taaaatcagc   60
tatacttccc tttaaaatat cctccctcat gcccacaccg cttagaatcc aatagccact  120
cctaacaagg gcctaggagg aactcatcct acatagccaa gaaaggggta cagcttgagg  180
aatgggcata tggctcagga agcagcacca gctgataaga actttcccca aagcagctct  240
gtttggcttg tgagtctcct ttccctgccc tggctctggac tccccagct gtgtccacc  300
cctggaattc ccctgttcct tatgtggcct gatcttgaga gttaaaatca taattaacat  360

```


ctttacagct ggagagctga gagatcactg gtctcaagcc attctccac cacaacttta 420
tagatgagga actgnatccc aagggtcccc agctcatatn ggaaagagcc aaaaatttng 480
gggtcaaact cttcaaatca ganatctttc taagganaan cctccttaac ctccagnaag 540
ccaccatac tggcttcaac tccnaacaa ctggggccag cngg 584

<210> 5705

<211> 598

<212> DNA

<213> Homo sapiens

<400> 5705

atacacaaaa agatttgtga acttgaacaa ggcaagagat acaatctaaa ctacaaagag 60
aacaaaagct aaccctacc ttggcccccg gagtaagaga tatcattctg aggaacacca 120
agtgaagcc tctaaaactg cccccctccc cagccaaact ctatgatcaa gatagtaa 180
gaaaaacaat attgtgggag gggtagtgag gtttataaga tataaaaaag taaaatat 240
ttcatatctt gtaaacccta ctatacatat tagtgcaggg agccaaaggc ccatgggaca 300
tgacaaactc agcattccgc tggaggctat atgatcaaac agcaaactgt ttatcatgaa 360
tgcaggatgt gggcaaactc aactggcct gccaccattg ccacagttnc catnttacca 420
gggnttttcc ctggacaagg tccttnggac ttaactggga ctgcntggga aggatttccc 480
cttcttgatc cccggttttc cctggnggga tccntaagg ttaccaggna ggcctttttn 540
aangaacctt ttacctttt tcaggcctaa gggntttntt ccgggggggt ctgggaag 598

<210> 5706

<211> 462

<212> DNA

<213> Homo sapiens

<400> 5706

gttggtgttt atttggtttg agacagagtc tcactctatt gccaggctg gaggcaatg 60

gcacgatctt ggcccactgt aacctccacc tgccaggttc aagtgattct cctgcctcag 120
 cctcctgagt agctaaggga ttacaggcgt gagccacat gtcaagctaa tttttttgta 180
 ttttttagtag agacgggggtt tcaccatgtt ggccaggctg gtctcgaatt cctggcctca 240
 agcgatccac ctgccttggc ctccctaaagt gctggaatta caggcatgag ccaccccgcc 300
 tggctgagcc agctgcttct gactcaaaga aaggagccna cagtaggcca aggaaagaac 360
 acaagcccgt gaatggggcc ctccacaag aatactgnca gaacccttcn ggctttccac 420
 tacattatgc tnaaantngg atgggantgg tangaaccaa aa 462

<210> 5707

<211> 566

<212> DNA

<213> Homo sapiens

<400> 5707

aagacgagtc tcgctcttgt taacagccca ggctgaagtc tggagtgcag tgatgtgatc 60
 tcggctcact gcaacctccg cctcctgggt tccagcgatt ctctgcgctc agcctcccga 120
 gtagcaggga ttagaggctt ccaccaccac acccagctaa tttttgtatt ttttagtagag 180
 atagtgtttc tccatgttgg ccaggctggc ctcccactcc tgacctcagg tgatccgccc 240
 gcctcagcct tccaaagtgc tgggattaca ggcacgaacc accgcgaccg caccagcca 300
 ggattttcttg atacactaca aaaaggggat gtcaacttat gaataaaagg gaatggggct 360
 tttggtttca gattaggcca gacaggttga tgatgtcagg aggtgtccat gaagagttaa 420
 atggaatttt acatatctta ttgnatttaa tatgtcaca tattctattg nattaattt 480
 tcacgacaat caghtaagaa ttaggataag tantggatct tcattcacia atgatacccg 540
 aanttcagag angngaatt ccttgc 566

<210> 5708

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5708

```
canggaaagc catgtagttt ttttaagtaac atattgctgg tagtaaaaaat gctatgacag 60
acacgacttc aaattttaag aaacaaaatg gactgttcat acttcggctt cagctactgc 120
ccaaagcagc tgtgatatat cttgcaaaga aaagagctaa aatttctgtt gataataaag 180
ttgtttgtaa actgatgcta aaatatattc caattgtctt attttttagtg ctggtatgat 240
ttactaactt ctgatagttt tatatgcatt gaataatgtg atattcttaa aatancagat 300
ttattcaaga atatttaaca tcaaagttgg gctttcaaat aaatatttta cctcggttag 360
tttttgaaca aatgttgcag gcagaagagt ggacttgatt cctttagata aataaacagc 420
ctacttaatt tccatgcaaa taacaactta aacattattc catgctcaac agtaatgtgg 480
gggaaagggtt aaaaaggcag gtncctcatga tggggaactt ccttacatat atccttaggc 540
agattctttc tttaccgnaa ggtct 565
```

<210> 5709

<211> 558

<212> DNA

<213> Homo sapiens

<400> 5709

```
aaaggctagt caagtgattg acatttccta aaaacatttc agtcatacct tagaaaacac 60
acataacatt caactggctt ttttctacca gaatgtctga tgctaatttg gaagaatttc 120
acgtatatattc tatttgccga atgtacagca cattcttttc acttcagcac tgacaatcca 180
aagtgtttca ttaaagaaac aggactttta cctttgttca agttgttttaa tggtagcagc 240
catctgatta gtcttctctt ccaagcgact gtttagttca cttttctgtt ttactcctaa 300
gtctgaactc tgcagcttaa aggcaagttc atgcttgaga gctctgaggt catccaactg 360
ctgccgaaga gataccaggg catcctgctt ctacagaca tccttctcca gcatcttcat 420
agccaattcc atctcctgcc ttatgctgat ctgcatctcc agttctttct caacatccaa 480
tcggaattgg ggctcttctt ttaaagcttc ttggtttact taangctggc cttttgnagt 540
ctatcttgct tgggancc 558
```

<210> 5710

<211> 559

<212> DNA

<213> Homo sapiens

<400> 5710

```
acttattagt gctttatgtt acatgaaatt aagtgcacaaa atacttaaat aatgctgtgt 60
gccaggcacc actctcaatg gtttgactca ctgtactctg cacaatcacc cattttccag 120
tgaaggaaat ggaggcacca agggtaaagt agccagcaca agtcagacct catggcgggg 180
ccaaggcatt ctggctccaa aatccccgaat caaaaagcag aaggtcaaaa aattaaaaac 240
aaagaaacat cacacacgga aggaggagag gccaaagatt actccgaggg attaaaatct 300
gagttttcct ccggtttacc ttctacaact ctttttactg accacgcctg acacactgac 360
acatgcattc cctgncacag tggcttctgn ggcccgcctg gctgtactgn acagtgcac 420
ttctnaaggc ggagctgcgt ggacccctgg nccttnttgg gccatggctc taantacccc 480
atggttcctt ccaaaggcaa tgggcantgg cataggtanc cacacgtccc attttttaa 540
aaacctgnnc cntggatgc 559
```

<210> 5711

<211> 555

<212> DNA

<213> Homo sapiens

<400> 5711

```
atTTTTTTga aacagagtct cactctgttg cccaggctgg agtgcagtgt cgtgatctca 60
gctcactgca gcccctacct cctgggttca agcaagtctc ctgcctcagt ttcccgagta 120
gttgggacta caggcctatg gccacctcac ctggctaatt tttgtatttt tagtagagac 180
gtgggttcac catgttggcc aggatggtct cgaactcctg acctcatgat ccacccgcct 240
ctgcctcccc aaagtgctag gattacaggc acgagccacc atgtccagcc aattagttgg 300
```

ttttaaatat atttaagtta atggacaaaa tattctaaaa gggcacagtt aatgacgcct 360
 cttcctagtg aatccgtgtt ctttatgagg tatcttttat agttgtatct tttttttttt 420
 ctgagatgga gtctcgtct actgtagccc aggatggaat gcaataagt ngatcttggc 480
 tcaactggaac ccctggcttc cgggttcaag gaattttctg gcntaaaccn ccggggaact 540
 gagaattcag gcnc 555

<210> 5712

<211> 338

<212> DNA

<213> Homo sapiens

<400> 5712

cttacttttt ttttttttta atccaggtac ccaattttat cagccaagtt tggagtaang 60
 ggttgatgaa tgttgataca gtcattgggt ttcatattatt cattatgtct tccttcttct 120
 gtgggaggca gcgctgagat gataaatgct gggtctcanat ccagcttggg ccactcactc 180
 ccaagattca tacacaaaca gaccagcttg atcagggccc agcagggagg tgaggcttaa 240
 gcctcctcgc tggaggagga gccaaataaga agactggcag cttggatagt gagtgtgtgt 300
 gtgtgtgtgt gtgtgtgtgt gtgtgtgngt gnnngnnn 338

<210> 5713

<211> 555

<212> DNA

<213> Homo sapiens

<400> 5713

aagaaggtac tactgctgta agaagttaac aagtaataat ttctatttta acatctgntc 60
 ataattgacat ttccgctgca tttttttcca tcaagaatac caaaacagtt tcctaataata 120
 cagtatttga aagtgtttgc catattggct cttaaaatga tagactaatt tttctcattc 180
 aataaaagaa aatttctaata aacaaaatac atgtaaagtt agaattttat aatttccaca 240

aaggaagcag catttattaa ccagagtact tgtttgcaat tttttatctg tgaaaatatt 300
 ttaaagctct tacaaaactt aaattttttaaa aaaatcagct caaaaatttt ttccatgttg 360
 ttgggcatac cactgctgtc tctgctttcg gttttccaac tctgtaagaa gggcttgnct 420
 gtatgcttca tacatttttaa caatctgctc caattctttc atgaagagca ctttagcatt 480
 ccctggnatg natccaggca gncagctggn aagagttcca cttcaaaatg gggcatantt 540
 ccangggctc ggCgn 555

<210> 5714

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5714

ctggatgcaa ccaatcactc tgtttcacgt gacttttate accatacaat ttngggcatt 60
 tcctcatttt ctacattgta gaatcaagag tgtaaataaa tgtatatcga tgtcttcaag 120
 aatatatcat tcctttttca ctagaaccca ttcaaaatat aagtcaagaa tcttaatatc 180
 aacaaatata tcaagcaaac tggaaggcag aataactacc ataatttagt ataagtaccc 240
 aaagttttat aaatcaaaag ccctaattgat aaccattttt agaattcaat catcactgta 300
 gaatcagagt ctgtaattct tttcttgatt agagtggtag gacactgtaa tactgttcct 360
 ccatgtttcc atgcatacaa tgttatgtgt tactctacac tgtaaatgca gtattcaaatt 420
 tcaacttgagc cgtgggcctg gaagtttagag actagctttt acettattac tttcaatgat 480
 tttatctggg gtttagctgac aaatctnttc gnggntgaat ccaaattcctt nagggctctcc 540
 tcaggggggg cnc 553

<210> 5715

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5715

```

ggtagagatg gggtttcacc atgttggcca ggctggtctt ggactcctga cctcaagtga 60
tccgcctgcc gcagcctccc aaagtgccag gattacaggc atgagccacc aggcccagcc 120
tacttcttga attaaaaaac aaaaaacaaa caaaaaaccc aggcagataa tgaaatcctg 180
catacactca agtctgcatg aagcataagg ccaaactgga aagtgggcat ttgaacaacc 240
ctcttctgc tcccttcccc taactaagat gggcttctgg gcctatcaac cattctttgg 300
taaagagcag caattcccca taggctcttt aacaacagca ttggtgtttg aggttgcac 360
tttaaaacat ctatttcagg atttggaagc ttctggaacc ataactttaa cccagccttc 420
cataacagtc tttttacttt ctattacaga acatgacact gcaataatag caatgaaccc 480
gcttcaagct ttttcacttt ctggcagaaa gcttaaaaca cttctncaaa tatataaagg 540
gggctggaaa gcttaatttc ctgg 564

```

<210> 5716

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5716

```

gaatagaggt aacagtctga acttctttta atgtttgctt tgttttcttt tctgctgact 60
tgaatgcctt ctcagcagct tcaacagtct tttgngtttt cttagcagca tatctcttgn 120
gatcataata ctttttggca ttggcatatg ctgacaagct gagatcaaca tctacaagta 180
agggttatt tttctgaggc ttctgcagct gtttattctt ttgttttttc tttttcctt 240
ttggtggttc agtttcattt ttctcaacat tgacgtcacc atcaacatca tcatcttcct 300
cctctgataa caagtatgga tttcttagca gcattgtaac atggnttggt tgnagtttaa 360
ttctttgatt gcacttgcaa caggggtctc cttgaccctg ggcttctttc acaantaacc 420
ccaatttctg gccaatctat ctgggtagct taagccttt ngaactaccc ggaatgggtc 480
tggaactat tggnaggta attctaata gctctccttt cagttggcca attccggnc 540
cctgctgaaa agcttncaaa cnng 564

```

<210> 5717

<211> 525

<212> DNA

<213> Homo sapiens

<400> 5717

```
cactttggga aatttttta tcaatcagtt tcttaggaac aacacccagt gggcatgatg 60
agaccctcaa agtaggaatg caggaatgat aggcaggtga ggtggntgag ctatctgggc 120
tgggaggcca gcctcctgga atcttaggac aaataaaagg gggaaaaatc caacctcaca 180
cttnttttga aggtcggata tgtttacaga aacaatttct gttttggaaa ataatgnat 240
ggtncaatth ggggctgggg gaacaatgac aattgtcanc tagagagagg ctcattgattc 300
tgagataaat gtttaagtga gctttttaaa atgctgaaac aaaacattac cttgggtactg 360
tctccatcat gagatgtatt tgacacattt gaccatgtgt aaaaccccca gatttaccac 420
atgccatgga tccatgtgcc cacnccatga atncaaacct ggnggatatg ttccaggaag 480
gaccggcnna gagttcatgn gctttacttt tnggaaagaa aattt 525
```

<210> 5718

<211> 540

<212> DNA

<213> Homo sapiens

<400> 5718

```
aataaagcag aaatgtatth attaggcacc ctgtttcctc acagaggagc aagatccagg 60
cctgagcgcc tgggaagtct cttgaggttg caggaatctc cagagaaaca tgctctgacc 120
cttctgctct ttcaggatgg tctcatagcc cacgccccgg gtggggtaca tgtccccctg 180
gtagctttgc tctgggctgg acttggtcac ctgggagacc tcggggatga cgtagaagag 240
gacgaaggcc caggcattgg cggcgagggc gatggccagc gtggggtcat ccaggtggg 300
actgttgtgc tgcttggtgc ccgtaagtat acatgacgat ccacaccacc catatggcaa 360
cggaggtggc tgggcctgcc agggngaaga ggagcctgga aaagtcccct tgtcccggg 420
```


ccaggtcctt angggccttc ccaaatccga acggctttnc ttgncaccgg ttgctnaanc 480
ccaacacgta aggggttttt aaaggacctg anagtcttt gccggctttt cgcgngtng 540

<210> 5719

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5719

aacagaaatt actgtaactg ttgaattatc tgggagatag acacagccct gtccttngg 60
tctacgaaca ttgggaaaca caagtaacaa tttcaagcat aacctctggt ataaacaagg 120
gaaacaacaa aagttcatgg gcactcatca caaaaagact aataaaatct aagacctagt 180
aattccttat ggagtaagaa gccagaaata ataaaagaac tgttttaatg gaaagataaa 240
ttcacgtgtc agaacctaga gaagcaacag acaagtctga acaggaaggc agtaagggtta 300
tgaatcattt taatgcgttc taaactgaac ttatgggcat taaaagcta ttgaagggtt 360
ttagaagagt tcctgggttaa gaaagaactc ttatgagagt aatggggaag aangcttgag 420
agcaaaaaac ttttaaggaa ggcttttgag gttgagaaga caatagnggt ctgggttgga 480
cccggngaaa ctggtagga tcccgacttt anggangtag aaccnttaag gngngggagg 540
atgaatgacg agttaagcct g 561

<210> 5720

<211> 406

<212> DNA

<213> Homo sapiens

<400> 5720

ctgntaataa gaagacagct ttattttctc aattagttca cgtatataca tggctgaaat 60
ttacttattg ctacaattct attcttcttc cttttttttt gagatggagt ctgctctgt 120
tgcccaggct ggggtgcagt ggcacgatct cggctcactg caacctccgc cacctggatt 180

caagcaattc tcctgcctga nactccccgag tagccgggac cacaggcgca tgccaccatg 240
 cccggccaat ctttgnattt tcagtagaga cagggnattca ccatgttggc caggctggtc 300
 tcgaacttct gacctcaagt gatccccgcc cgntggcctc ccaaagngct ggnattacng 360
 gcgtgagcca ctgggcccag ccctattctt nattttngac atgnaa 406

<210> 5721

<211> 248

<212> DNA

<213> Homo sapiens

<400> 5721

gaccaaaaaa ggcaactata tttaaagtaa atgtatgtga ttcttgtcac aacaaatatt 60
 tgcattttct cagcggcagc tgcggcacct ggggtggaagc cgngattgag gtgcccgtcc 120
 atctccagct tcaccccggt cagggtggtct gggggcagga tctcattctc ctccctgttg 180
 gctactcatt tccagcgaag tttaatctat ttttaatant cgttcannnt tcanggaaat 240
 ggnngngc 248

<210> 5722

<211> 523

<212> DNA

<213> Homo sapiens

<400> 5722

aatagaattt cattttaata attaaagttt atcgcttcca aaaaacagca ctttaattac 60
 attcaagttg tattcatttt aaataccaac aaacccatca ttacatata gagctagata 120
 ttacaaaaca gatggaaatt taaacaagtt ttttttttaa gtccttccaa atttagaaca 180
 ttgtgaacta ttaagtacat gcctaaaaaa tgtacacatt atcagggaaa cacaagttgc 240
 tctaatagga aaagagccat aatacacata cagtgggaata taattcaaata aggttcaatt 300
 tacaggtatg tcttaaagtc aagaaaaccc caaagctaata aactagaact atagggcaaa 360

atcatagctg actttctaaa ctaatgcacc actatataat gcttttcccc agagaaaggt 420
agaanggtct caagatttat ggtggcccca tggatttttc acgggggtctc aaatntaaaa 480
nccagagttt tctttttggc nttaaattac nctcanngtt tgc 523

<210> 5723

<211> 484

<212> DNA

<213> Homo sapiens

<400> 5723

ccaccatttg ggacgtcttt attatggatc cgtccactct tccaggagca gtagcccttc 60
taggaaaggg gtgggaagaa aaccagccta cccttcaagc tgacttagga tgcaanggta 120
cagacaccag ccttggggga gggttctcca tccacactcc taccctaaac gggctttgtg 180
ctgctcaatg gggattcggg gccatcagaa gcgatgccgc ggntgggggc caaagtgcac 240
ggncaggttg tgctccaggg gcatgtggat gggaccgaag tcatagttga cccgnacgtt 300
gggcagaggg ggcacgtacg gggctgggat aggcccatg ttgagnggga agttgntgaa 360
cacagggccg cacgggaagg cagcggaagg gtgggtgccc caaagcatng ggnnggatct 420
gtgcttgtn g caggttntgg gaacgggcct ngganggcct tcacctttgg aacttttctn 480
caag 484

<210> 5724

<211> 566

<212> DNA

<213> Homo sapiens

<400> 5724

aacttctaaa actcagtcac tagtgatcct accaaaaag ttttaaaata aatgtgtata 60
ctttttggac aaatgtgtaa attaggtata aagatgaatg agaatttaca gaattgaaaa 120
taaataataa cagagagaaa tgaagaatta ttctgccaat actatgattt gaattattag 180

caaggcaaaa aacatactat tcagatccct aaaaaccata tgaagcttct ttttaaagtg 240
 ctcaaacgtc ttaatggatt tgagttttaa aaccagatct taattttttt tggtttatta 300
 caaaaattat acacataaat tataaaatga tcaaatacaa gacagttttt caatcccacg 360
 ccactgaagc aagaaccatt aacaatttga tggttctttc taggcatttt tngngaatat 420
 aaaatgnata atgnattatt ttttaagacat ggcttttggg aaaatgcttt aatantatat 480
 catgggaaat ctttcacctc ttinggactg ggcagacctt tnaagctgga gaaaaatttt 540
 cngngaccaa aaaaaaanng ctttat 566

<210> 5725

<211> 573

<212> DNA

<213> Homo sapiens

<400> 5725

cataaaatga ttttaataga aaagtacaag acatgancaa aaataaataa tctttatctc 60
 atttctagcc cagcaaattg tncactgcat ataaaaatgg tctaagatgc aattttcctc 120
 cattcctttt ttgcttttaa aatactgaga cagcatttta gttcaatatt ctaggttcaa 180
 actgatacat taaaaaaaaa tcataccaac ctttaatcat tctacatcca ttttttaaag 240
 ttagctaaca agatgatgtt tcaactaaaat aaaatatcca atcatcagat taaagtgtaa 300
 agtttgtgtg aacaggggaa ttagatcatt tctctaagtt ttaattccta tgttctgaat 360
 gtttcttgaa ttaaaaattc attcatcatc ttactttcaa accacggcat ctctctttta 420
 ccattccaca gaggagggga aaaggactag aaaatacctt taaaaaaatt aaatatttta 480
 aaaggatagc ttacaggggc catggaggaa ttanaacct ggggccttng ggcctatttg 540
 cattaaancc aggttnagg ttttacctcc ctt 573

<210> 5726

<211> 530

<212> DNA

<213> Homo sapiens

<400> 5726

```
gcattgccat gattttatta ttagtgtcca aaatgggact cccaagtaat aaatgattta 60
ttccagccac agccaaaaaa gactttgcct ggctaaaaga gtctctctct aagtatgtaa 120
tatacaagaa atacaattca aagagatggt cctataagta cattttttac acggcatata 180
tttaaaaagg aggccccctt taatataaaa ttccggttat ataccaatat ggtaattag 240
catttacact atagtttgaa cgtattttta atagcatgat gtgtatacaa tgtctcccgc 300
gccattggc aaccagggtc gtgggaagct tggtagaggag ttaaccaggt cctgtggttt 360
aagcagngga gcacccggga attcctgccc ccttttgggt tncacaattg cctccattct 420
ttccgccttt cntggttttc tccaaaacca cctggatang gggggaaggc cctggatttc 480
tggagggggg cntntcaatc aaggactggg tttngttttg nccttttnga 530
```

<210> 5727

<211> 545

<212> DNA

<213> Homo sapiens

<400> 5727

```
gatttagtta catcattctt ttcttctcta ctttctcttc ctgaaaaact cttcettaca 60
taaacaatt catactggag atatatgtca gaaaacattc agcctgagta aactgaacgc 120
tctgtacaga aaacaacgaa caaaacagaa ctcaacagt aacactggcg tggcataata 180
taagccacgc aaaatgcttc caaatccatt atctcttctg agtttcatct tgtgaggttt 240
gaagggtaca ctgattgtac ttaaaaacct aaggcacaga gaagggttaa taacatgcct 300
gagttactaa aaagagaatc cagatctagt tcaaaatctg gncttctttt cactatacca 360
ataacatctg actgggaggc agnatgagaa gagcaatgga gtaagcacta anggtaattt 420
caggggcctt aaacccccta atatattatg gaccactctt canttgaaaa aaggttggca 480
tttcttnaag cnttaaaten ccattatata tttttnaagg gtttcccagg tcntttctac 540
ttntt 545
```

<210> 5728

<211> 513

<212> DNA

<213> Homo sapiens

<400> 5728

```

agtagagacg gagttttacc atgttggtcca ggctgggtctc aaactcctga cctcaggtga    60
tccgcccacc tcagcatccc aaagtgtggg attacaggca cgaggcactg tgctggccaa    120
ctctctttct ctctctcttt taatctcttt attatggaaa ttcagaaact atacacaacc    180
cagaatagtc tatgaactcc ctaaagactc atcaaccagc ttcaacaatg atcatctttc    240
tgcccatctc attcctctcc tttttttttt tttttttttt tgagatggag tctcgctttg    300
tcaccacaggc tggagtgcaa tggcacaatc tcaagctcac tgcaacctct gcctcctggg    360
tacaagcgat tctcctgcct tagcctnccg agtaagctgg gattacaggc gcatgcccc    420
gtgcccagct aatttttnga ttttttttta gtananacng ggnttcacca tgcgggcaag    480
gctggcntgg aactccnggc ctttgaactg gca                                     513

```

<210> 5729

<211> 250

<212> DNA

<213> Homo sapiens

<400> 5729

```

cgagcaanaa tctgttaaca gttttatttt ttttatgtta aataccangg gacaggattg    60
taaggatgaa aaactcagtc aacaactgcc tcacanggga taanaaaaat tctgccatga    120
tattagcaaa ggtaaaggag gaaaaattta cncgtgaana ggcncattt ccccaaggaa    180
tacctntngg catttcctga atgagnggga ttagcaatct aaataaatca tatttcaaga    240
ggtancagca                                     250

```

<210> 5730

<211> 569

<212> DNA

<213> Homo sapiens

<400> 5730

```
gccagataat ctttatttta cacatttgca acacggcaag agaattcacc ccgtacatca 60
ccatgatcgg atccccacc cattatacgt tgtatgttta cataaatact cttcaatgat 120
cattagtgtt ttaaaaaaaaa atactgaaaa ctccttctgc atcccaatct ctaaccagga 180
aagcaaatgc tatttacaga cctgcaagcc ctccctcaaa cgaaactatt tctggattaa 240
atatgtctga cttcttttga ggtcacacga ctaggcaaat gcaatttacg atctgcaaaa 300
gctgtttgaa gagtcaaagc ccccatgtga acacgatttc tggaccctgt aacagtatct 360
tacgtgctcc aaaggctgac cttctggagg ctcaccgcct catctggctg cttcctccaa 420
aatccaaaac cttgcctcaa aataaagctg tcctgtgggt gaagttggct ggtctggttc 480
attctgacca ttctgacttt tgnccaaaaa gccgtccaac tgnagacacc ctgntggcag 540
aactccaaca ggtcccnag gtacgaggc 569
```

<210> 5731

<211> 583

<212> DNA

<213> Homo sapiens

<400> 5731

```
cctggacagc atttcatttt attatgtaac tgtagaaagc cttgatcaag ataaaaatag 60
ggatgactta tcagaaactg aagaattttc ttaggaaagc aaagtttact gaaggatacc 120
ttcattccag ccatgatgag catctgtctt ctcaggcaat catgatgaag ctccagggac 180
agtataacct atctctccca ctcatccctg agccttggtc ctggactgaa tgtggttaga 240
ggttgtggaa ataaaaaaaa gaacccaaat aagaacactc tccataaaag ccaagctcag 300
agactgggtc tcttttgctt aggtacaaca ggagcaggaa ggatcaacat tcttgaaagc 360
ataccttcta ttcatttggc ttttttgact tggggccgcc agtgtnagc tgagcactcc 420
```

actgcccttt ctccactcac aaatgtctgc ataggtacac gttccggcac tttcaagcct 480
tcttccacgt naacttcctt ggggcttttc ggtggnccat nctgntcct tgaaaggtaa 540
aagggtcaaa ccttanccaa gatcccaang gactccgaga tna 583

<210> 5732

<211> 460

<212> DNA

<213> Homo sapiens

<400> 5732

aatgttcaag gagcacttta atagtcaaca aattgatgca gttttgtcac aatactttgc 60
ataattttat agtaacagta aaattctgaa tcactttata gtaaaagaaa agacacagag 120
gaaaataatt tccctgtaca atgaaatttt catacactat atgaagattt cccacatctg 180
tcaagttttg gctcagaata aaagatagct aatatatttc actctttttt ctggtacttt 240
tttttttttt tttgagacag tggttcgctc tgttgcccag gtcggagtgc aatggcacca 300
tctcggncca ctgcaacctc tgcctcccag gttcaagcga ttctcctgcc tcaacctctc 360
aggtagctgg gattacaggc gtgcgccacc aaaccagnt aattttggat ttttagcnaa 420
accngnttc accatgtggg nanggctggg ctntaactcc 460

<210> 5733

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5733

aatttttttt tttttttttt tggcagagtt tctgcattca aattaagtcc ctcaaggga 60
ggaacgaaaa agagcccagc atttcctaag cttcatctac gtgacagggc atttatttag 120
nggaattaca tacaggaggg tcttgagat tgcctttgcc tttcacttgg gatgaaaatt 180
tcctctgcag catgcaaac aggtgagagt gttcctgctg ctacagagtt cttttgcact 240

aaaagaaaaa tcttcctcct ctcaaatttt gcctaccaac tctagcacag tcattctgagg 300
 cagcatgaat caagcccagt tttcttctta cagtcacttc cttaacagtt aaaagaagca 360
 tctgtcttct tggacttctc tggacctaata accccttata ggtagctat cccagcaca 420
 aagagatttt caggaatacc tcaacttgnt cactcactac atgcctctta cagtctacca 480
 accatgggtac ccanaaatgg actcagattg cncataacat actgcttcnc atacctggcn 540
 ggtaggaata gcctaaaggg gtan 564

<210> 5734

<211> 558

<212> DNA

<213> Homo sapiens

<400> 5734

gttctagatt gttttattca gtaattagct cttagaccc ctggaagcct gtgctctacc 60
 cagacgctaa caacagtctc tatccagttg ctggttctgg gtgacgtgat cccccatca 120
 tgatcaactt acttctgtg gccattagg gaagtgggtga cctcgggagc tatttgcttg 180
 ttgagtgcac acacctggaa acatactgct ctcatttttt catccacatc agtgagaaat 240
 gagtggcccg ttagcaagat ataactatgc aatcatgcaa caaagctgcc taataacatt 300
 tcatttatta caggactaaa agttcattat tgtttgtaaa ggatgaatic ataacctctg 360
 cagagttata gttcatacac agttgatttc catttataaa ggcagaaagt ccttgnnttc 420
 tctaaatgtc aagctttgac tgaaactccc gnttttncag cactggantg tgggccgtat 480
 gaaagaaaac ttacantag atgggagaaa agggaatagt ncttgaaagg nagggnggtt 540
 tttttttttt gacagggc 558

<210> 5735

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5735

```
cgactgtaac ctgctttatt aacacagaaa ctgcaccaca cacatttgaa cctcatagcc 60
aatgaacaga cccagcactt agcaacttct ccctcctgcg ccccagagaa gggagaaaaa 120
gagggagcag aggagcacca gctacttccc aaacagcgcc acggggaagt cctcgccatc 180
actgttgctg tgctgcagct ccccgctctg cccagctct ctccaacat cttccatgag 240
ttgctccagg tccaggtcac tggaggcttc gtctcaagg gggacacttc cagcctcctg 300
ggtcaggggt tcccgggtgc tgggctcttc tttcgcatat gaggggcagg cccccttaca 360
cgctgatagg cccaggttct ttggcactgt tctaacttct tttccctctg aaaagctggc 420
tgccaaggcc ttgctctggg gagctttaaa tttttctta aggctgggtt ctctccttnc 480
ttccttttcc aactcttctt cttctccttt ttctttanca ngatcctggc tggttaaaac 540
caaaaactgg aagctttttt ttcc 564
```

<210> 5736

<211> 571

<212> DNA

<213> Homo sapiens

<400> 5736

```
acacaaaata ctttatcagc agctgttttc atcaaaaaat caagtcagtt tcacagttga 60
aaaagttaca cattaaaata ttttacaatt cattatatat tcaccagggt cccattttct 120
aatgggcttt taatataaag cagaatagaa gggaaaatct caaagttgat tactttgaca 180
ctaagtttta cataggacac taagaaccac aaaaagctta ggttctattg taaaatagca 240
accaaattcc attcttcttt taaaaatcca attagaaaca tcttttttaa aaaaacaaat 300
tccacaataa gagtaacaga tticaaatta acagtagtct aaaaatcttc aaaataaatg 360
gttttgtata gctgagaata tggtagaaag tgaaagcata attttccaac agtcatttct 420
tactacagtg ngtttaaaat tatttttatt acttttagac tttttctcaa aataattatt 480
canggaaata ttcttaaggn gggccaataa aactgnagag gccataggca ggtaccccca 540
tattcanggc canggatggc agctnttgat g 571
```

<210> 5737

<211> 539

<212> DNA

<213> Homo sapiens

<400> 5737

```

gacagagtct cactgtgttg cccaggctgg agtgcagtgg tgcgatctca gctcacttgc 60
aacctccacc tcctgggttc aagegattct cctgcctcag cctcccaagt agctgggact 120
ataggtgtgt gccaccacca cgggctaatt tttgtatfff tagtagagat gaggttacac 180
catgttggcc aggctggtct tgaactcctg acctcaagtg atccacttgc ctcagcctcc 240
caaagtgctg ggattacagg catgaaccac tgcacctgga nagcccactg cttcttgatg 300
catgttttga acttcaaattg tggaccagct gacagaggct tcaaggggac ctttagctga 360
ttctgctcaa ggaccagttt attttggttaa catcaccaaa tagcctanag tggggatatt 420
acctaatttt agaagagtct tatgnnctaa naaaagtaga tgcatagggt gatcatgcnc 480
agaaagattt tcatgctcct ctttgctctn ctttcnttg aacatccagg gggcnctaat 539

```

<210> 5738

<211> 567

<212> DNA

<213> Homo sapiens

<400> 5738

```

caaattaatt atttctttta ttcccaattg gtaaatagtg aatggggcag aggagcaaag 60
attttctttt ctttcttctt acgctggata aacaagaaca gaaaacagcc agttatatgt 120
gaccctctaa tcttactca cacatgcttg ctttctcact tatgtcataa ctgcccaatc 180
tgaaacagta catcacagat gacagatgca accagagagt tcaggacagc tgatatcgag 240
atatccagca accggccctc gtgcaaaagg aattccgagc ggttttcgtc cactctggcc 300
atggctagca aagccttggc cgccctgcac atcatgtcta cgctagggtg ttccaggggc 360
gggggctgca tgtgcatgag gttgtgctgg ctctgctggt actgggccat cgtgacccca 420

```

tcctctagga agcttatcaa gtttccaatg cttcctttct gcacagctat ggcccttgct 480
gctagtgcgt ccccttggca aggttcgata aaagcgccat gggcatttnt cgacagactg 540
ggntttgggg ancccaacgn acctant 567

<210> 5739

<211> 504

<212> DNA

<213> Homo sapiens

<400> 5739

ggttttaaat aaaaacactt tattgcacaa atcccacaaa ggtctcaggc cctgggtcca 60
agccccacagc cccaacctgt cccctggctc tgggcctggt ctttggtgcc caccctggcc 120
tcacatgcca acgtcttctg tggagtgtgc aggtgtccat gagcggtcct gtgttggggg 180
aagcctgcct gggccacaag tagtcaggca ctgtggcagc ctcacgatga agacaggtgg 240
ggtggagttg ggtccccacc tgcccaggct caggggccac aggggtctac acagtccttt 300
ctgctttgaa acacgtggta gatgctggtg ggaggggaaca tggcaccgga caccaaacag 360
ggagcccact ttggatgggc acaccaactg gcagcaatgc cgggcgaacc ccaccatgca 420
caaggaactt gnanncan cn ttacatatga gaacccccac ngacncggaa ccacgaaagg 480
accccaagga ccacccttga atgg 504

<210> 5740

<211> 560

<212> DNA

<213> Homo sapiens

<400> 5740

gccatggctc tcaaaccaaa gacagtagct aaagttgacc tcctctcaac ttaaggcaaa 60
aggctggcat acagcacaga agcagaccac cagcttcttt actccacatt tccaccactg 120
gatggcagat attccccctc tagaaatgca ttaattttat ttactaaaca gggcagcagt 180

tcacaggtct caagaccggt cactttgtga tgttttgcag ccacacaaca ggaggctaata 240
aattatttta atagccatac tgagactctt cagtttatta agaaaaatgt atttcctcag 300
gcattttaaa atatatatac atttaatat tttggagctg tatttgcatt ggatcataat 360
agattatgtg cacatgtgca attataaaca taatgtgcta ccacaggctt caacaaagag 420
ctgttaaaga tacttttttc ctttctcatt aatattacct tagaaaagaa tccccatgct 480
tggtttataa aaatctacct tnacttaaac agacaggtta gaacngaaca tcctatctta 540
aaggtgggta aaaaaatctn 560

<210> 5741

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5741

aaatcttggt ttacaatagt tacaatagga acccatccca atccttgggg ctggccatag 60
cgaaaaacac taaatactgg cagaaaggaa aacaactgat aaatccagag cccaagatta 120
cggatttgaa attaatacac taccactacc acctctctcc ctgaaacaga gacctctct 180
gngtaaaatg aaagagatga aaggagctta aaaagctgct taaaactgca gaagtccctc 240
tgggtactga cctatctggt tgggcctacc ttttcaggga ctgngtccat gaccaggtct 300
ccatacatgt tcatcacctg gggagaagat gggaggcagc ttgccatgga ggggtgcggca 360
tgggtacagg gctcccccat gcagagggcc ccagacaccc tgntccctga atccccntc 420
aggcctgnnt ctctaccctt tctncctggn cactgagcca agtctgncca tcaagggcc 480
aaggcattca tggcagcacg tgccgttata agccctngga agnccntacc atggattgcc 540
tggnatccct gggaaaaa 557

<210> 5742

<211> 512

<212> DNA

<213> Homo sapiens

<400> 5742

```

agacacttcc atttgc tcat gatggtattg taaaatgntt atcaatgcta atgatgcagt 60
tctccagagc cccattttgt ttttaagggct gtaagtga aa ttgttaagaa ataaatttcc 120
tatgtaacaa tacatcacia aggaaagcaa acagaacaat agccagggcc ttctccccgg 180
ctaataggga tgtcacttgc tggggccttg gaatccatga ggcctgagca tctgggttct 240
ttgctgtgcc caanantggg catntgggag tccctggcac aagagggagg gccaccatct 300
tggagaatga ggagaatgaa gatgagatta gagccacctg ggtcttggtc ccagctctgc 360
cacttactgg caaatcagga aggaatgttc ctgagggtct gagaaagcat cattctctct 420
gggccttaat tctcanggca gaatggggca cttgcattgg gaaaaagtng gcaccttaac 480
ntgnttgctn caagggtaaa ggnttgcnaa ac 512

```

<210> 5743

<211> 551

<212> DNA

<213> Homo sapiens

<400> 5743

```

ggagacagag tctcgtcttg tcaactcaggc tggagtgcag tgacgcgatt ttggctcact 60
gcaacctccg cctcccagggt tcaaataatt ctcgtgcctc agcttcctga gtagctggga 120
ttacaggtgt gtgccaccac aaccagctag ttttttttaa atatttttag tagacatggg 180
gttttgccat gttggccagc ctggtctcaa actcctggcc tcaggagtga tccgtctgcc 240
tctgcctccc aaagtgtctg aatcacaggc gtgagctacc tcgcctggcc tgaattattt 300
tatacaggta aatttcgtgg gcgtgcta at ggtactgtgg tttttagtaa tatcttggtt 360
tttaggagat acgtgctgaa aggttttagt catgtgacag gatgactgtg acttactttt 420
aatgattagc tgaatcagag aacaagagag agctggatat gtgtgnggct atgttttagac 480
ctagagaaaag agaaagcnaa tntngcccat ggtaacgatt ggtaaatctn aagtcgccgg 540
gnggatgggg g 551

```

<210> 5744

<211> 549

<212> DNA

<213> Homo sapiens

<400> 5744

```

aagagagaca agatcttgct acgttgccca ggctggagtg cactggcatt atcatagctc   60
actgcagcct caaactcctg ggttcaagcg atcctcctac ctgagccttc caagtaggaa  120
gggctacagg catgcaccac catgcccagc taattaaaaa aatttttttt gtagagggtgg  180
agtctcacta tgttcccaa gctggtctca aactcctggc ctcaagcaat cctcccacct  240
tagcggttgt agacatgaga caccacacgc agcctaaacc tttcttctta aagaaccctt  300
aacacaaggn caatatgcaa aacaaaatac agatactaca gaataagctg gagtagcaga  360
gagagacata agataacctc accttataca atgcagaaca tctgncctta atcataattt  420
tttttttttt ttgagccagg gctctttctg ggttcctggc tggagtgcc a angngngac  480
acnggctact gggagcctta anccctgggt taaaagancc tctgcttanc cccccaggaa  540
cttggactt                                     549
    
```

<210> 5745

<211> 499

<212> DNA

<213> Homo sapiens

<400> 5745

```

caggaacagt aatttgactt tgtctatatt aaaaatcata aatagtcaac aaatacaaaa   60
aatacaaaga gtttgcagat atgatcagng cattataggn gttttcaa at ttctcctatg  120
ataaattaaa aatgtaatgt tggacattaa tttcctaaac ccaatgctca gcaattttct  180
caaattgttt cgcttttccc aagagacttc agaaccattc cctggagnga attatttcca  240
atggtgaaga gtaatggatg gatgggatga cattctcaaa aaaatcttgc tcctatttca  300
gaagngtcac tccagcccct tgaagggtcca ggaaacctgg ctgagtagtg tggctctatgg  360
    
```

aggtgcatgg gcttcagagt caggccaacg ttgatcctga gtcccagcca gctgcttant 420
 anctgnngga tagttatacn aggacacatc tagtgatggg gctcaagctg aagacngnta 480
 tctggcgatg cnaaaaacc 499

<210> 5746

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5746

gttcataaca agttgatgta gacgttcctt cagtttatta tattcacgct cttttctctt 60
 catatcatga ttatactgag tagctcgact tgcaatgata ttttgtaatt ttttgcacct 120
 catctttctc attctttagt agctgatgca aattcctgtt cttacattgt aactgtctgt 180
 ctctttcctg aagcccaatc atttccctcc tggaggtttc cagttgttcc ttaagttttg 240
 agtagcagct ctgtagatgg tccatatac ttcccagctt caaattctgt gtctccacat 300
 tttcctgagc tagaaggttc ttccgctgaa gcacaagcag ctcatcata caatttagta 360
 cagctactat atttaactct ctctttgtct ctttaccttt ggattcttca tataatgaag 420
 gaaaacaaaa agtagtcaat tcctggtagg agaaaatgnt ttcttaaagt tggttacagn 480
 tgaggagata ctggcagagg atacaaactt tcagntagat aggaagaata agnttaatag 540
 gactattggn ccaccnnggg gnc 563

<210> 5747

<211> 550

<212> DNA

<213> Homo sapiens

<400> 5747

ggaatatattc aatccatgtt ggttgaatcc acggatatgg aacccatgga tatggagggc 60
 tgaccgtata gttggaattg cagttaacag tcaatgactg cagaactttc tggcatctag 120

ttcgtggggt ctccgggggc ttttcatgtt taacttccaa tctgtgaaga attgttgag 180
 gtgatcacct gccttcctac cccacacacc aagcacagga gacccctgat taacaacaaa 240
 ccaaaagtgc atgctgcttt aaggaagtaa ggatagaact caggaatgca gtttcaaaag 300
 atcacaggaa cttcaagaga atcttcctac catatttagt gctttctcca attttcggag 360
 aatcttcaac agaatggtag gaagtaaggc aaatacattt gattaggctt atgaggagaa 420
 attagaggaa agtgggttga gaagtgattt aatcactatc ctgcatatta aaagatcaga 480
 tnggatacct ggtcaatggt tcnttggttt tgaaatggag ncttgctntt gganccag 540
 tgganngcca 550

<210> 5748

<211> 558

<212> DNA

<213> Homo sapiens

<400> 5748

gaatggcaga gggagggtta atggtgtcac cttgtcttgc taatgagcca aaaaaaaaaa 60
 aaaaaaaaaa aaaatgcaag taaaaaaaaag tttaatcaca cagcacttta tacagatatc 120
 gtaagcagta ggcattcaca tctccacatg tacaatgcac tgggaagcac agccccacca 180
 gtcactccgg gtgtttctca aacaagatac cgactcggtt ccaaagcca cgggtgtgtg 240
 tccggctcca tctctccgca gctctgctgg ctgggcggtc acagcacagc acaggtgtgg 300
 agcccaactta aggctgacaa gacgcacat gctttggctt tttttgncct tttttcta 360
 aagagttaat atctttgctt ttgagttttt ttttcaacct taaatattca tacatacacc 420
 aaaaatttca tagcttgcaa tgngetcaac agcatcctnt nggcctggag cttacattnt 480
 caaagcttan aaacttgga acctttggcc tgtttttggg cncataggaan cccccgccg 540
 cggncctttt ggatgagc 558

<210> 5749

<211> 541

<212> DNA

<213> Homo sapiens

<400> 5749

```
gcagtggctg gtattaagaa agtttttctt atattaagaa agtttttcct ttcttaatat 60
ttagtgcttc cttcaggagc tcttgcaagg caggcctggg gttgacaaaa tccctcagcg 120
tttgcttgta tgtaaggatt ttatttctcc ttcacttata aaacttagtt tggctggata 180
tgaaattcca gttagaaaat tcttttctct aagaatgttg aatattggcc cccactctct 240
tttggttgt aggttttctg cagagagatc tgctgttagt ctgatgggct tccctttgta 300
ggtaacctga cctctctctc tggctgccct taactttttt ttttttttat tgagaaggag 360
tctcgtctg ttgccaggc tggagtgcag tggcacatct ccgctcactg caagctccgc 420
ctcctgggtt cagccattc tctgcctna cctnccacgt agctgggact acaggcgccc 480
accaacacgc ctggncaatt ttggaattt ttaatanan atgggggtca nccgggtacc 540
n 541
```

<210> 5750

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5750

```
aaaaattatt aaaacattta atcactgaaa acacaaatcc acattaggaa attatctttt 60
aggatactta tacaaaactt aacacaggat tattgacttc actgttaagc aatgtgcata 120
ttgctactct ttctccttca ctaatttttc tacccttgga attaaagatg tgactgcaag 180
tcttagggca gggccagaac ccaacagatt ttttgtttt gactcagtca aagctgaaaa 240
ggcagcatca cataaataaa cagttgaaaa gggtataaaa aatttcattg ccctttcatg 300
gagttctggg taacttgtct ttgcatttat ccaaaactga gttacagaca ctgatttaaa 360
tagtgcttgt aatcctaaat ctgaagatag ctctgttagc ttttcttctt cgaagtcggt 420
gagattatta ttttggtgat tcataaaagg gtgaattatc cacaaatttc ctgaacgcaa 480
gtcttggctt ggtgggaaaa cagcctggac ccttgggaaa agtccttcca gggctcaaaa 540
```

taatcctggg anggctggca tatt

564

<210> 5751

<211> 543

<212> DNA

<213> Homo sapiens

<400> 5751

gcaaggaaac tgcattggga caaatttcca attcatactt aacaagggtg ggaaacgggt 60
cattcttggc ctgctccaga acaaggggag agtctatgca ctcttgagc agcaggcgca 120
gggagggtta aatgtgaggc cagaaccaa tctcctgttt ccaggagctg aggatttaga 180
agagtctctt tgggtgattt ttacaggaga gaagaaggag tgaccagcaa gtgagaggag 240
gcctgcaagg gtagaggaag gaggatgaat aataataatc acaatacttc tagtcctttt 300
ggaaaatatg ttctcatcct tcaagtcgac gtcaaagtct tcccactttt tgaagcttcc 360
ctgcctcccc cactaacctg ggtgtgaagg ttctttctca gatgtgtctg gctactttgt 420
gccaggctcc ctggtanaag cttgattaat gctattcatt tcattcttac ncaggnattg 480
ntggcataca ttaaaaaaga tggaactant cccaanagtt taattggctg ccaaaagcnt 540
nca 543

<210> 5752

<211> 471

<212> DNA

<213> Homo sapiens

<400> 5752

aagagatagg gtcttgcttt gtcaccaga ctggaggaca gtggcatgat cacagcttac 60
tgcagccttg acctcctggg ctcaagggat cctccacct cagcctcccc agtcgctgga 120
actacaggca cacatcacca cacctgggta atttatttta ttatttcatt tttgtggaag 180
ggtctcacca tgttgcccag gctatacaag gcttaatttt aaaattttaa atcagccggg 240

catggagact ctaactgtaa tcccagcact ttgggaggcc gaggcaggtg gatcacctga 300
 ggtcaggagt tccggacaag cctggccaac atggtgaaac cctgctctac taāaaataca 360
 aaaaaatgag gcgggcatgg ngggtatgtg cctgnaatcc cagctactca ggagactgag 420
 gcnnngagaat cgnttgaccc aggaagtgga agctgcantg anccaagatc g 471

<210> 5753

<211> 575

<212> DNA

<213> Homo sapiens

<400> 5753

gttactctct taaagtggca gaaacagaaa agttgtggct ctgctggtag actagtttgg 60
 aaacactgat tcggacaaca caatttgtaa ttcagataga ctctttattg gccaaatgga 120
 ttccggtttt gaagacgatt cccaaaacgt tctgatatag aactcttctg gccttaggcc 180
 tagtttagag atttgtggga agacttcaaa ggttaccatt ttcctctgtg gatctgtaaa 240
 attaaccatg aatacctagg tcagatttcc ttttctctac ttcactctgt ttgggcttcc 300
 tcagggaaga tttcagctac ctacctatag gagaaatgcg caatcaatta ttgatttaaa 360
 tcaaactctg aaatatcata tgattatgat aaaggagta tcagcaggtg aatacattaa 420
 gccaggcaga cccttttttg aatagcttta aanggccagc ttcattaggc accaaaatct 480
 ttcaacttca aacttttgca gccttatcct tttaaangca nccnttgnaa agngngcttcc 540
 ttaaccagta cttggaaaaa ggttgggtata ttcca 575

<210> 5754

<211> 590

<212> DNA

<213> Homo sapiens

<400> 5754

gtggaaaaag tagaagtcag acaaggacca ggaactggcc aatgtacatg aataaatgga 60

aatttgcttc tatctctgtg cttggaagca agctcaagcc aagaggataa gcaaaacaag 120
 tctaagaggt caccaggccc ctgatgacaa gctaaattca gattgacttc tatgtgtcag 180
 cccacttagg ccagtgcatt tgctgtatgt tgggtggctc tgaacacagc agaaagggga 240
 ctaaatgcag tactgtctta cagtgatctg gaaggccttc cccacgttcc aacctgctga 300
 agctgggaag gcagcaggga tagttcatag gcttgctggg gcacaagccc agtcagaagg 360
 tctcctgccc cattctctcc ttggaatatg tcctcactgg ctgagcatga aggaagctgg 420
 ttcaaagggc agaataaacc atgggggaatg ggaanggcca aagggccaaa agttnccacc 480
 ttttgagtcc actnacctn atctgggggn ggncatatg ccaaaacctg gcggangcca 540
 gccaatggcc ttttttccct tgggccttta acccttcaan aaaaggnttg 590

<210> 5755

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5755

gagacaaagt ctcgctttgt cgcccaggct ggagtgcagn ggcatgatct cggctcactg 60
 caacctccgc ctctgggtt caagngattc tcctgcctca gcctcccagag gagctgggat 120
 tacaggcgcc tgccaccact ccacgctaata tttgnattt ttagtanaga caaggtttca 180
 ccacgttggc caggctggtc ttaaacttct gacctcaggn gattcgcccg cctcagcctc 240
 ccaaagngct gggattaccg gcgtgagcca ccatgcccgg cccttttctc cttcttcagt 300
 acctgggggt ggctggacga gggactgcag aaggactgtg gtgctgggag gcacagctct 360
 ggatggcatt gggacagngg ttagcactac angtttgggc tgcaatggcc ggntttcggg 420
 tggcaaggct ttgcctgang agcctntcaag ggatgggccc atgccgatct tggaaagttc 480
 caatganggg gctgggaaat tccccaggag ggttcttnaa ggcacaggga ctttggttaa 540
 tttcaggacc ccnctn 557

<210> 5756

<211> 529

<212> DNA

<213> Homo sapiens

<400> 5756

```
actgtggact tgtagtatag tttgaagttg gatagtgtga tacctccagc tttcttcttt 60
ttgcttagga ttgtcttggc aatgtgaact gtttttttgg tttcatatga attttaaatt 120
agtcttttct aattctgtga agaatgtcga tggtagttta atgggaatag cattgaatct 180
ataaattcct ttgggcagta tggccatttt catgatattg attcttccta tccatgagca 240
ttggatgttt ttccatctgc ttgtgtcctc tttgatttct ataagcagtg gtttgtagtt 300
ctccttgaag aggtctttca cticctttgt tagctgtatt cctaagtatt ttattctctt 360
tgnggcaatt gtgaatggga gttcattcat gatttgcatt tcttcttgnc tgntggtggt 420
ggtataggaa tgcttngac ttctgcacat tgactttgat ctngagactt tgctaacgtg 480
cttatcactt aaganncttt tggcctgnaa agaatggggt tttcganan 529
```

<210> 5757

<211> 571

<212> DNA

<213> Homo sapiens

<400> 5757

```
gagacaaggt cttgctctgt caccagaggag tgcagtggca cgatcatgga tcaactgcagc 60
catgacctcc tggactccag caatcctccc atctcagcct cccaggtagc taggactacc 120
ggcgtgtacc accacactcg gtattttttt taagagacag gatctcacta tgttaccag 180
gctgggtctca aactcctggg ctcaagcagt cctcccacct tggcctcccc aaaagtgatg 240
agattacaga catgagtcac ctgcctggcc tgatggtaaa gggggttata acctgttggg 300
aaataaatta gggttagatc aactaactt caaaatgcaa tcatgatcat acatggtaag 360
ttcctcaaaa aattaaaaat aaaattacca tattatccag caattctact tcagggggtat 420
atgccccaaa gaactaaaag caaggacttg aacagatatg ttcaatcacg aacccatgtt 480
catagcagca tttttcncaa tagtcaaagg ntgaaaccac cccaangcta tggaatttgc 540
```

ccggttaacc aaaggggat ttttccttgg g

571

<210> 5758

<211> 540

<212> DNA

<213> Homo sapiens

<400> 5758

aatgaagact tctcagttgt attatatattt taaaaattta aaatgaactt gtatatgtgg 60
aaggattgat gatctgtact gactccagat ggttatgttc tcctgatgac agatggaagt 120
ccaggaggcg gggccatccc aagtgtatgc cagcaagata tggttctact gctggtgacc 180
tcatagaagc agagtcata ctggagaaag acatagctct catcctgatg ggcatctcct 240
gcccctgagg cctcagttag ctgcacttgc cttctgcac tcctggggat ttcactccat 300
cagttagcat cttgnttact gccttcccat gtgatggctg ttttaagctcc agagtccctt 360
actctccttc ctgccactat atcatcgata tgggtggcct gggaagggat ggcatttatt 420
catgacnggg ggcaagtgtc cagatcccag atctaccgaa aatctttcat tctggtgggg 480
ccccctgntt ccatcctggg ngncctntcc ccnaacttta ttttaacaggc anggncatag 540

<210> 5759

<211> 556

<212> DNA

<213> Homo sapiens

<400> 5759

cttaagtgtc ttttaatactc cactcagggc agccccctccc tctactgaga ggctcttggc 60
tctggcccca agagcagctg gaaggccctg gcctgacttc accacttgat gtccaggctg 120
tgtgtgccac gctcctggct ctggtacgtg gtatgcagca cctctcgggc cttgggggag 180
ttgatcccct ccagccactc ctggtacagc tcctgcacgt gtgcactgga ctccggacgc 240
cgcacaggga tgtcagcgta aatgccttcc atctgccgca gcagggcctt atccgcatgt 300

ccgtctggag tctgggcttg gcctctgcca ttttaagcatc ctcagcacag gcgaggacct 360
ccacaaagtg gaatggggaa cttgcccttc ttaagcttta aggacatgtc tggatgtttc 420
naaagccata ggctgcagca aagcgtacac cacctttccg tcttttaang gtgacctttt 480
ggaaagcttt ggttttaagg cttggnaagn gacctctcaa atcctngttg naaaagtctt 540
ggccnatgnt taaaat 556

<210> 5760

<211> 580

<212> DNA

<213> Homo sapiens

<400> 5760

gtagagatgg ggtttcacca tgttgccccca ctggtctcaa actcctgggc tcaagtgatc 60
cacccttctc agcttcccaa agtgctggga ctacaggcgt gagccactgt gcctggcctg 120
tatctacaga tattaagaaa aactttgggc tgcatattta gacataactg cttttttgca 180
attttgattt catattctac tgctaagatt tcttatatgg gatttgctgc atttcacaga 240
aatctatcta ttcaaaaatc acactcatgc tgattttgct agttcaaaag cagagatatg 300
accactataa ggaaagcccg tgttcacttg cattggtaat attgaagaaa taatacactt 360
catgggaaat aaatacagga tatttacaaa atctttggta aaacttccta agaagtattg 420
gttgggggttg gttttccgga gaccagaagt ctncctttgg caccagctg gaatgcaatg 480
gcncgactcg gttactggna accttcgctt ccgggggttaa gccaatcttg ggcctaacct 540
cctgagaact gggattccga agcccgtgcc caccagntan 580

<210> 5761

<211> 521

<212> DNA

<213> Homo sapiens

<400> 5761

cgtaactggt gtaagccacc aggttctccg tgtactgcaa gatcgacttt acaaacttta 60
 ggtactgctg atactcatgc gcattcttcc cacaaacagc atgaatgttg accaactcca 120
 gcgcaatgag taacagtatc aggctgagca caggggacag tagtctgata ctactccaca 180
 tacgcaggta gttctgccgc tggcgagacc gcagcgtcct ttccacccac tgcctgtgtc 240
 tcagctctga ggcaacggtg acctggctgg acacacggcg gcactgttcg ctgatgcttc 300
 agagcacaac cagcactccc agcacaatcc tggggcagaa caggggtggga acaggtgtgc 360
 tgcagagctc acggagaagc tggggccacg tctcagtagg aagacgatcc aagtccttta 420
 acacacaacg attctnaggc atatggngat cagctcatcc gcattttttg gaatcnaaaa 480
 ntngcagggc atttggttca anaattatit tctaantga c 521

<210> 5762

<211> 533

<212> DNA

<213> Homo sapiens

<400> 5762

ctttttcttt tttttttttt ttgagacaga gtcttactct gtcacccagg ctggagtgca 60
 gtggcacaat ctcggtaac tgcaaccttc cacctcccag gttccagcga ttctcctgcc 120
 tcagcctcct gaatagctgg gactacaggc atgcaccacc atgcctggct aagttttttt 180
 attttttagta gagatggggt ttcactatgt tggccaggct ggtctcgaac tcctgacctc 240
 aggngatcca cctgccttgg cctcccaaag tgctgggatt acaggcgtga gccaccatgc 300
 ccagctagct ctgcctcctt ctaaattaga tctggtcagt ttaccggttt ttattttggg 360
 atcgtactag tactcttcaa ctgaatttta accttacttt gaaatattta tatctggctt 420
 taagaattta aatgaagaca ttttcacagg actaattcta gaaaaaaggc tctgnngnac 480
 antnaaaatc tataatataa nttaanattt ccagaactgg cttgaaaatt ngg 533

<210> 5763

<211> 462

<212> DNA

<213> Homo sapiens

<400> 5763

```

gagggcgggg caaagggagc atgacgggga gaggaggag gaaagaggaa aggaaggcca 60
gggtgggagg aaggatcagc taaatctgag ggaagaagaa ggaaaggaga gggactattg 120
catagcagat gcaaataag ggacttggg ctagtcagga agaaaggga aggaaggaa 180
ggcaagagag aggggtgaag ggaacctcag gaagggtgt taaggacaac cgaaaaatc 240
atctagtaat aaaactacaa acagacacaa tatatataat attatatatg tataaataac 300
agctggctat ttacaggggg acacacacac ggacacacac acacacggat ccaggggagt 360
gggggctgaa agatatggct gatagggtga ggaacggctg agggttggg gagaggccct 420
tcttctaggc agggcaaact cctccgggga tttaannnnn nn 462

```

<210> 5764

<211> 513

<212> DNA

<213> Homo sapiens

<400> 5764

```

gagacagagt ctactcttt ggcccaggcc ggactgcagt ggcgctatcg cggctcactg 60
caagctccgc ctcccgggtt cagccattc tctgcctca gcctcccag tagctgggac 120
tacaggcgcc caccactgcg cctggctaaa tttttttct ttctatttt agtagagaag 180
gggtttcacc gtattagcca ggatggtctc gatctccga cctcgtgat caccacctt 240
ggcctcccaa agtgctggga ttacaggggt gagccaccgc acctggcctc ccttttctt 300
tatagcacct tcatacttaa caccatgaca tcaaatgaca acgtattcac acagaaagca 360
ggcattttgt ttactggttt atttatgtt acttatgcaa ccaagagaac ctatatggct 420
gtcatgggag ccctacctt tagaaagaga acaaccncat caggacaagt tntaaaacac 480
ttntggatac naggnggan taacctttga ncc 513

```

<210> 5765

<211> 543

<212> DNA

<213> Homo sapiens

<400> 5765

```

ggatattaat cccatggtgc aaggatttcc tgcaaagtac ctttaatgtg tttaaatacag 60
cagcaagcat taggacatgc tatTTTggcc ccataagtta ggtgtgtagc actacacatt 120
agacaccaag tcatcccaac caatatTTTat ccatatgaac agataaaactg aacaaaaaca 180
tagttctgat aaaacctgca ttcacaacct aatgtagttt aaagtaaatt ttttcacaat 240
tgagggctgc tatTTtaggac tgTTTTgtta ataataaaaa caggaattat atagaagata 300
aaacaccatt ttttactgct atataatgtc ttgctatata aaacataccc tcaacaagtc 360
aaaatatTTa aaaccagtgt ttcaaatacc aaaaatcaca gctatgttac tggTcaagta 420
acttcactca ataaatggta ggactggant cttggangga aaaaactgna gccaagnCag 480
nacTTttaag ttggnctcca aggtTTtaaaa ggacggaccc tactttgnaa acggaaaact 540
gcc 543

```

<210> 5766

<211> 556

<212> DNA

<213> Homo sapiens

<400> 5766

```

ctTTTTTTTT gtttGctgca gaatttgcat atgacagctg ctatgatcag tgtatttata 60
tatattttaat cctcatctaa ttaggaggta taagtaaccc tattgtacag atgaagaaaa 120
aacatcttgc tgaaattaca agttaatgtc tcagaaacag aattcaaact cagatttGtc 180
tgactccaaa acgtactttg tagtactagg gatatactgg aaaagccctt cagcTTTTa 240
tatagtcaat tgtctgtaaa aaggacacag tccaaacaat gaactgttaa catattttac 300
attattgaat atatacatgg agactgtaaa gaggtaaaag ctctaaaaat aatggattca 360
cagaacttga aaataaagtc aagactgtgg tctctctctg aaactgaata gagtaaaaca 420

```

gacgatgaag aaatgagcta tttgcagagg taataactta cccttaangg naaatttcaa 480
 atatcttttt tttttttttt tttgggaaca aanccttgntt tggcaacca gctggaannc 540
 ttgggcccaa ccttag 556

<210> 5767

<211> 523

<212> DNA

<213> Homo sapiens

<400> 5767

gaaaagccag accttgtgcc ctgttttga acaccgactg ggaagatggg gcttaggtaa 60
 cagccaaacc tggctgtcag ctgtgtggga gccaccacc tctctgggaa gagttcctgc 120
 ttctgtatgg caagcataaa tcaagctcag tctgggttat ggagaagttg aaaattgttt 180
 tgttcctcat tagtttataa ttgtatgaaa tacgatttta atgaaaactt ttcagaattc 240
 acgtttgtgt agatatttca gagaaccatt tttactttac atcctaaaac tgccttttcc 300
 tatggttttg tcaataaaac actatgatgt tggctctgttt ccttttatat ctcaagtctc 360
 aaaactttta aagacagtag atatttgngg gtttctagct aaatgagggc caagattgga 420
 ctttttcaac taaattgaat catgtagtaa tatctgattt catagctttc tgggggaaaa 480
 agggaggatt tggaatanca nncntgcang gcaggacnng taa 523

<210> 5768

<211> 537

<212> DNA

<213> Homo sapiens

<400> 5768

aagtatttta ggtaggtatc accatttagg ttgggtagaa gtaattctta aatcttaaga 60
 agcgatcata gatatgtgga agccaatagt cattactagg gatcatgatt cggaanaaca 120
 gcctctcttc aatgatcctg aatgagccct ttgaattcct ctcttgcaac tgatctcccc 180

atggggagtg gtgagggatg ggtggcagga agggacccta acccaaagta gttcagagcg 240
 ggtgagtttt aggagcattt cggtacccaa cacagcttca cgattgagaa tcatcagtca 300
 tccccagctt tctatttcat ttgctaacct ctctaggaac aactggatgt tgtaaagtgt 360
 tctcatctgg ccttaaaatc catgaaagct ggaaaatcac aaggcatctg ngcatatact 420
 ggtggatttt aatgagaagc ctgggggtng agcccngaaa taaccngctt tanaagccaa 480
 gtagnaaagg ccctggattt tgacctggcc atgggnntac ctatttgagg ggggatg 537

<210> 5769

<211> 531

<212> DNA

<213> Homo sapiens

<400> 5769

cttgtcatgg ctattcaggt ttttagttca gctgctgagg cggtgagaag ttttcatgtc 60
 agacgtacag gtagcatttt accccacttt cctctgtcca aagcgacata caagtaacag 120
 gcctgcttcg tgctgccatt cagaacaggc ataaaaagca aatcatttac tttccggaaa 180
 cagagtccag ctgcacagag cattcgcggt tattcccttg ttctatcatt ttctaccacc 240
 caacaacatt cagcaaaacg agttaataat agttactggt gtttgaggaa gggtaaaaaa 300
 ataaaataaa ataaaataaa actaaagaac acacatggca gagatacgat attactgcaa 360
 aagcaggtga atgcgggaac atccttggct tgccaggctt tatgtgaagc ttgcattttt 420
 cttatccttg gctttcttgg tttgctgggc cccaagatgc tgggcctggg actgtagtaa 480
 ctgaaccggt ggctttcttc ttctggaaag tggtcacctc cttcttaagg n 531

<210> 5770

<211> 548

<212> DNA

<213> Homo sapiens

<400> 5770

atgaagattt attttttaag ttctaaggaa ctttagtttt cttatttgta gctaattctc 60
 ttcttaaaat ttatttattt tttaacattag tctctttaca tttatttata tatattttta 120
 ttatacttta agttctaggg tacatgtgca caacgtgtag gtttggtata tatgtataca 180
 tgtgccatgt tgggtgtgctg caccatttaa ctcgtcattt acattaggta tatctcctaa 240
 tgctaaccct cccactccc ccaaccccac aacaggcccc ggtgtgtgat attccccctt 300
 ctgtgtccaa gtgttctcat tgntcaagtc ccacctatga gtgataacat gcaatgtttg 360
 gttttctgtc cttgcgatag ttgctgaga atgatggttt ccagcttcat ccatgtccct 420
 acaaaggcat gaactcatca ttttttatgg ctgcatagna ttccatgggg natatgngcc 480
 ncaatttctt aatccnggct atcattgggtg gacattttgg ggtgggtccc aggctttggg 540
 tattggga 548

<210> 5771

<211> 540

<212> DNA

<213> Homo sapiens

<400> 5771

gagnggcagc gcctttattt gngggggcct tcaaggtagg gtcgtggggg gcagcgggga 60
 ggaagagccg anaaactgtg tgaccggggc ctcaggtggn gggcattggg ggctcctntt 120
 gcanatgccc attggcatca ccggtgcagc cattgggtggc agcgggtacc ggtcctttct 180
 tgttcaacat agggtaggng gcagccacgg gtccaactcg cttgaggctg ggccctgggc 240
 gctccatttt gngttccagg agcatgtggt tctgtggcgg gagccccacg caggccctga 300
 ggatgttctc gatgcanctg cgctggcgga aaagcgcatt gaccaccggg ctgccgggcg 360
 gactagtggc gccttgaana ggaagctgag caggacagc acggggtgga aaggctgcgg 420
 cttinggtcc atgtcagtgc aaaaacttac gcccttgac annttgggca aacaacgctn 480
 aggtccaaca ttaatgggtg ccggncaaca ancgaggtct ttaaaccgtg ttgggcaaan 540

<210> 5772

<211> 542

<212> DNA

<213> Homo sapiens

<400> 5772

```

agggtctctt ctcctgcctt ctcattatta tggggttttc cttcttctcc atttattttt 60
gaagtatttt tatttttcaa ttcattctct ggcttctggt ctgaggaatt atctattatt 120
ctcttatttg aattttctga gtcactgctc tcagaaaagt ctgaaacatt gtcagttcga 180
agtcttttca tatttagttt cttttcatcc tcctcaggtt tccttctttt attcatcaag 240
tgtttgtttt tacctttagg attttctcct cgtgatatat aatcatattt ttctccttc 300
atcttctctt catctggtat actgctatct gagcccttcc tcttattcgg acggatactt 360
ctttgttgct gttgctggtg tgtattctgt ttggtacag cagcttggga gttcattgct 420
ggctctgggac tatttgcttg gcacctgtat aaaggctgng aacagcggtt gacgtttgaa 480
tggcacnaaa ctgcgtcgng atgtaatgcc.aaaatttcan ccttttaaca aagaggggac 540
ca 542

```

<210> 5773

<211> 280

<212> DNA

<213> Homo sapiens

<400> 5773

```

acatttttat aatngtatt tattattcaa atagcttgac agcaaagtgt tggaaaacga 60
agagcaggaa ttccgcggtt cctgcccggc ctgccatcc agctgggaga agagcatggt 120
catttccttc acttagtcca cggccactcg gcgctcatcc ccagcacagc cctccccagg 180
ccgcggcaaa gactgttgct gtctgtctga gggatgtgcc cccggggatt caatcgagat 240
tctgtaagat gtgggggatg tgggtggcgg ngngnnnnnn 280

```

<210> 5774

<211> 403

<212> DNA

<213> Homo sapiens

<400> 5774

```

gaacaagaca aagatgaact ttatngagng ttacaacagc tcagagacct ccagggggta 60
tttctctctt gtaggcaggt tgcccatcag gtattcagtt ctcagtagag aggaggccct 120
ggagaggatg gctcctctct gcaactgac gccctaangt ctgcagctct cagaagagag 180
gaggccctgg agagggtggc tcttctctgc ccacaggttg nctctgcagc tgnancagg 240
gagggtaggn ctttctgca actggctgtt ccatcatctc caactatcag cagagagggt 300
agctcctctc ttaggcttgt tgacccatag gtctctgcc tctgggccct ctggcagncc 360
tntgccctac tntggctgaa cccagggttt ttanggncn ccn 403

```

<210> 5775

<211> 549

<212> DNA

<213> Homo sapiens

<400> 5775

```

caggggagtc aggatgactg gattgggggg gtgttgggtt aagggtcca aaccccagca 60
ctgcattgta ttttgagga cgacctctt tccgggtccc aggggtgatt gtgctgttta 120
ggtatgtcac tgcaactctt ttacgtcttg gctcaaagac tgctccactg tagaccgat 180
ttgctgttgt tcttcttttt cgctcttgcc tcttgcttg gatttcttct agatggcat 240
gtgttaccaa ccctagagac accatgaagg caagtttctg agggttctcc tcccgttttg 300
gtttgggtgc agcaggtggg gtgatgggtg ggctctctgt ttgtttctca tctgnttctg 360
tgtgagattt aactgtctgg ttccaagac ttggcttgct aagctgtaca agtttgaagg 420
ccaacnaagt ctgggccctg gagtancat cacaatgctg gtganctggg cccatgggga 480
aaccgtttgg ctatggttgc antctgncca ttgacnacac cggaccgggt ggattggaat 540
ctgggatng 549

```


<210> 5776

<211> 530

<212> DNA

<213> Homo sapiens

<400> 5776

```

cttaatatg agtttattag ataaagacaa gaaaaaatgg ggcttgggga aattggggct 60
tctgggggtt taaggagcat gctgaaagaa cgtaagaaac aaaacatgaa gggaaatgga 120
aatgttacct tcaactccct cctccctgct gtccagtgtg gatgccacct ccagcctgca 180
ggacggagcc ccctcccatc atcacacagt gcacctgggc tctgcagccc cttgcctcca 240
ttgcagccgc agcaagaggc ctccacttgt ccgtcaggga cgctccaagg aaggaaaaag 300
ccgcccccg acaggggaga ccaactgtgt ctctgtgggc aggtggggca ggtgctccag 360
ggaaaggggg gctgaggtag ggggcccagt gatcaggcac ctgatcccaa aagtgggcct 420
tggtcttttc tcctggactg ggaacttcgg cagaagtcan gctncacaat gngccccaca 480
atttgagaaa ggcttccta acnttggccn aaggaanttn cccccaaatt 530

```

<210> 5777

<211> 541

<212> DNA

<213> Homo sapiens

<400> 5777

```

gagtgtggaa acaatgggat tgagctttta tcttagggaa aacttttaca agaaacagtt 60
cactgagagg gctccagaaa gttattgtag acctggaaac tttaacaactg ttcctcatgt 120
ccagcaaaag caataacatc ttcatcttt aaagctttaa ttctttaagc aatctacttt 180
aatcacttca aggcggtgat atcattagat gttacaaaat taaagagctg ggctacataa 240
tttttggaa tctgcaccaa agaagccatt cacaatggaa actgtggagt ttcggtagat 300
ggcactcttt tctctgagtg acaactcaag gtccagcatg tgaccgtaga tgtagaacag 360
gggctttcct gaggagctgt ccttiagcct caactataat ccttggtaaac tcacagccaa 420

```

tcatttttaa aaagaagcct gtagataaga catcaatcca ggaatctgaa gtagtnaga 480
 ngcatttaac cacagncttt ccttctttcc agaaatggtg cagnggantt ggtttctttt 540
 t 541

<210> 5778

<211> 539

<212> DNA

<213> Homo sapiens

<400> 5778

cactgctttt cctttattga taggtcagag agcatttcct ggcaccccca gggtacagcc 60
 ccctgactcc tgctacccaa gaaggccatc ctttcctgaa tccaagtcac ctgcatgac 120
 aagagcaata aaactgtcct tgggaagagc ttctgacacc agtgatggct gggaggccca 180
 tgtgacgtgg atgcttgga tgttgcatt gacatccaga acctgatga gaactttgca 240
 atgggctggg ataggattgg gaccaggtc ccttgctga acatccacct cgtaggcagg 300
 gttcttttca tagtctagag gtcgacgcag aatgacctgg cctgtcttgg catcaatact 360
 gaagggtgtc agcacctctg gaggcattgt cttactgagg aagaactcca cctccattg 420
 gggccttgg caaggtctgt ggcggcaatt ttatgagaag cgtaccaagt gccanattt 480
 cttggatttc aagggccagg gaacttttan naaacncng ggttttggca atggggcca 539

<210> 5779

<211> 493

<212> DNA

<213> Homo sapiens

<400> 5779

ccaagcacat ccacccatgg gggctttatt cagtcacgtc cccacgcca cggtnactc 60
 caccaggcan acagagggga ggccacccca ctgcaaagg tcccagccag ngggcaccaa 120
 cctcaggaan acgtgtccc cacctggagc ttccctcgn tgccctggcc cttgagccc 180

tcctgaggat ttgngctttg actntgacag ggagcagcag gaagctgcca gcccactgcc 240
 tccatgcggg tccttggagg gcanacggtg gagcggcgct tcctnagctc ccgcggtcag 300
 gccccatcag ggatggccac agtccagcca caggggcgac tntgcccac agtccccctg 360
 gggcagcgac canatcctgg ctggggcagc accggacagg ccctntntat gggcctaagg 420
 gcaatgcaag tgggggcttt gttgggcccc agncaatgga cccancccta ngaancctta 480
 attggcaana agg 493

<210> 5780

<211> 530

<212> DNA

<213> Homo sapiens

<400> 5780

atacttagaa atacttgaag aatgtggtcc cttttttag tagtactctc tacttgggga 60
 caagaaaata gaatatgcaa ctcagaaagg aaagagccca aagacgagag aacctgcttg 120
 ttagctcatt aacctgttta gtaaagatct gctttaaaat gcctgatgct gtgcagtatc 180
 atacaaaaca atcttcagcc ttcaaagcag ctgatgcacc ttctcagaga tctgtttgtc 240
 tgattaacag tctgctgcct tgggtgggcct tggctcttgg cactttcggg catcgatggg 300
 tttaatgaat tctactgctg ctgtgaactg catccaccaa taggactcct ctccagacag 360
 acagctagca taaaagctac tgatatactg gacagtagac agcaaacagg gtggatttgc 420
 ctttatcaac acaaacccea acacaggacc aaggcattcc ggttcanggg cagaagtcct 480
 cattggncag gcttaaggag gtcataatcg nnnagcccat ttttngatgc 530

<210> 5781

<211> 541

<212> DNA

<213> Homo sapiens

<400> 5781

atgttcacaa	tgtgatgggt	ttatttttatt	ttactatgat	gcaaaaccaa	agattccact	60
atagcacaga	gaccagtata	ttacaaggnc	atgaaaaaat	ggngtgggac	atgcaggacg	120
tgatgtacaa	actggnggggt	canatcgtct	cctntaacat	gacgctacac	tgncgctgag	180
gaacacattt	aataacactt	canaactgaa	ctgaaacgtg	gcacaaacat	gacaacttcc	240
aggcatgcct	tcaagcgtct	ccctnaggag	ggattcgcaa	cccctanact	tcagtgtggg	300
gaggattaca	attcttttga	agaataaaaa	gttcacactt	ttgaaatttc	acagaagaat	360
tttaaggcca	aaacatagtg	ggttcatttc	tcttcacttt	cagggacaaa	tctgagcttt	420
ctnaaacnc	attaagcttt	caggtcnaat	cccaggccaa	ccttgggacn	tctngactgg	480
aagtttttcc	catcggttta	aagctgataa	aggcaatttg	gctcctagga	agaanaaanc	540
c						541

<210> 5782

<211> 529

<212> DNA

<213> Homo sapiens

<400> 5782

attgtgctga	tgggttagag	aaagaaatat	ttaaaaacct	cagtccagac	gacacccaca	60
gccgctccaa	aagcctcgcg	ccctccccc	gcccccccc	cccaaggttg	agtcgccact	120
ttgccgccaa	gtttgtgatt	gtcacgagtt	cacaagtttg	gaatcctggg	tctggggccgt	180
gcagacgtcg	cggcgccgcg	ggctagcgtc	ggtaggggtg	gaacccttgc	acgttgtggt	240
tctgccctcg	tccaaagccg	ctgccgccgg	cgagggggcc	ccccgaccct	ggcacggagg	300
gacccccgta	ggaaggaggc	tgctggcttg	ggtctgagaa	gccctgtccg	aagccactca	360
agtcctgccc	gtaacctgca	tactgaccat	aggggaagtc	tggctganct	tgtcgggggc	420
ttgcttatgt	ccggggcacc	tgaaacggaa	gccgtgggaa	agnccnaggg	cttgcccccg	480
aatggnttgt	ngaaggaagg	aacccccgga	gggcnaaact	gntctgncg		529

<210> 5783

<211> 494

<212> DNA

<213> Homo sapiens

<400> 5783

```
cagtaaacca ctttaccaat taatctttta ttttttattg catacatcaa tatttaacag 60
aagaaaaata aagaaccctt aatgttaaac tgaattacat gttatcttct gattcttttc 120
aatgtagacc taaattttca catgtatcag taaacacaat ttatgttctt attaacattt 180
ttgaatctca cttttttgca tacaatttga catatatcaa tattattgaa tggctatata 240
acattctgng atagcactag caatacacca aaatttactt aaccatttcc aatcggtggg 300
cttttttccc ccttaaagtt atctgagtgg aactgctaga aaactttgta caaatagctt 360
ttctttcttt taaatatttt cctgggcata tgccactcaa agtgagtatg tcaaaagatc 420
agttataaag ccctttttat agncttctac acagggtctct taaaangntn ctaatcccca 480
tgntgntggt ntta 494
```

<210> 5784

<211> 485

<212> DNA

<213> Homo sapiens

<400> 5784

```
cagtgttcta acaagtactt taatggatag ggtttgctgt ctaaaacatg aagaggtaac 60
tcaacattcc tttcagtgcc acagggttaag aacttggaga actggctttc ctgaggagct 120
tctagctcca gaggttgtac atgctcatgg cagcaacaac ccattgacca cttcttcaaa 180
gtagtctact gccaaaggaga atcaaaattc aatttggatt cccaatactc agcctacctt 240
caatttccca tcaagcctat attcttagcc tttagttaa gtgtgggtta tcttaacagc 300
tcacttggcc tcagttcaaa gtgaaatttc ctgagtcctt gaaagaagta gaaaccaat 360
caatgagttt ttctcttgat ctctactttg tgagaaggat acatttctag aaatttcaat 420
acctttcaag ngtcagaang gaatntatgg aactggtgga aattgcnang gnnngataat 480
aaggg 485
```

<210> 5785

<211> 512

<212> DNA

<213> Homo sapiens

<400> 5785

```

cttatcaaaa gtttgtttta ttttcaatac aagataaata ccatgcttgt tactagtgca 60
gtttaaggcc gacaatggcc atatatcaaa ctgccgaaca gtcacctaaa tgctaaagaa 120
aggaaagaca aagtaaacad taaacacaaa attgcaatta caaacatttt aataaaatgg 180
aatgagcttt ttaattgaag ctaatatgaa gtctaattct catggacagc aaaaaaaaaa 240
aaaaaaaaaa agtctattan atcaattatc accttacctt ttgacacana aatcttattg 300
ngaagtcacc atagagtcaa tagctaaaat tttaanactt tctttggcct tctgatatta 360
aacaatttat ttacaaactg ngatcagtaa ttcggggata ttgggtaaaa tgatcaattt 420
tttggtggtg ntggtaaggg ctttccatta aaaattggaa aaccacnttt gnanggttga 480
ncaggcttga aactaacttg ggtaanatnc ca 512

```

<210> 5786

<211> 542

<212> DNA

<213> Homo sapiens

<400> 5786

```

gtttaaccct agctaaacct cataactcct taatgagaaa gacactaata atctacaaat 60
aatattttac aatgaaaaaa acccaagcac taaaaagtta tgtatcttgc cctaggtcac 120
atagcaagtg aaaggtcaga atcttaacac tgctattctg accacttgta ataccttctc 180
taggcttaag ataataaaca aattaagcaa gggatatgtc tttttatttt tccctttttt 240
gtttgtttgt ttgcttgctt gctttttctt tacgtagtat tgctgtgcta ggcacatggt 300
agtatctcaa cgaataattt gtattcagct ttctattaag cacagctctc tacaacctgc 360

```

attgttaaac atttatagtc aacaacatga tgttaattat gacgacctga agacattgca 420
 agataataga gtcacttgaa gcatcaaaga aagattaaaa tatgggtcatc tnggccctgg 480
 actgcgaata ntggngggg ncnaaagcca gggaaacttt ggccanaaaa ggcaggtccc 540
 gg 542

<210> 5787

<211> 541

<212> DNA

<213> Homo sapiens

<400> 5787

cactgatgac aatttattat aatctgttag tagcacacag acaaattatta gttaaaccag 60
 aaccatgtct acacagaagt gggcaatgac atgtgccatt ctatggcaca cggngtgcac 120
 ttaatcatca tgtttttagca ttttgatctt ctgcttatgg cgctcaattt ctttctgcag 180
 acgctcaatc tccttcttat gatgaacgat ttcttcttca tggngttttt tcaaagctgc 240
 cagttgttct ctactctgng ctctacaagg acacggtggc tcagggttta atttcaatcc 300
 ttcaccccaa agagatctca aagcataacc tgtaatgtct aagcaaggaa taggagttcc 360
 aattccatgg gagtctagct ggtcatcctc ttctactcct caactagtga aagaataccc 420
 catcttaaatt tgaggnggag ccactttaag aagaccaaag agcttattgc tttcaaattc 480
 cctttaaaan ggaaactccg aaagaatggg cccaggncct aatncctntg aggggaacac 540
 c 541

<210> 5788

<211> 475

<212> DNA

<213> Homo sapiens

<400> 5788

gagacagtct cgactgtca cccaggctgg agtgcagtgg tgtgatctcc gcgcactgca 60

acctctgcct cccgggttca agcaattctc cttcctcagc ctcccagagta gaggcaccca 120
 cgaccacacc cagttaactt tttgtatatt tagtagagat ggggtttcac tatgttggcc 180
 aggctggtct tgaactcctg acctcgtgat ccaccgcct cggcctctca aagtgctggg 240
 attacaggcg tgagccacca caccagcca ataaggctcc tctctttacc taaagattga 300
 ataaccacaca caccactgac aaccttcctt ctcatacagt gaggtaggtc aggaaagagg 360
 aaatataggt accaactagt aacgaatagg ggaccttatt aataggtagt aaaagcttaa 420
 actagattaa aagaangntc ttttatatta aatanccaat tinnatttta aggnn 475

<210> 5789

<211> 431

<212> DNA

<213> Homo sapiens

<400> 5789

gcgtgtcggc ctgcttttat tacctccan actgagcccc cgacctggcc cagcctggcc 60
 cgtccccaat ccannnggct ggccaggcca cctgcaccag ggaggacagc tgctggcagg 120
 gactaataaa cccttcacc tggccatggt ggtggtgttc tctatggacc gaggccctga 180
 aacgcgggca gggaggggca gagaacacac tagcttgggg gtgggcacca gcctcagacc 240
 cctcagcagc tttgggccct cggccgactt tcccaggcag tgcaggctag ccagtcagc 300
 gagtgtgcag cctggcttgg gtcgagctct gtcacatctg gataagcaac tgggggctga 360
 gagtcccagg gcagcctggc ccagcaggtc aaggcgccac agggggccat nangnccagc 420
 tngnncangc c 431

<210> 5790

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5790

gagatagagt gtcactgtcg cccaggctgg agtgcagcag atgcgaaact gaaaatacct 60
 ctgattgggt gctttgtgca accaatcaga tgttgcatag gagcgtaact ttgtaacttc 120
 acttcagcct ctgattgggt gcagaaagca ggccgccact tcatttacac cgggtgaaca 180
 ccaagtggcc aatgggaaac ctctaagggg catttgact ctgtagattc tatatcctgg 240
 accttgagct gctgctccac ccattcccac actgtggagt gtactttcat tttcaataaa 300
 tatctgtttt tgctctttca ttgcttcatt ctttccttgc ttgtctgtgc attttatcta 360
 attctttgtt caaaacacca agaacctgga caacttcag tcaagaccaa gaccgtctac 420
 tgataacaca ggtcagatac ttcacagcct gctactgagg gatgctgtgg agcttcagg 480
 gccagagatc cttggtggat ccacaacttt tcaaggggnc ctcagcactn tgnganccca 540
 cgtggcagcc ttcttcn 557

<210> 5791

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5791

cctgagacag ggtctcactc tgccaccag gctagaatgc agnggcttga tctcggctta 60
 ctgcaacctc tgcctctcgg gttcaagcga ttgtcctgcc tcagcctcct gaggagctgg 120
 aattacaggt gcatgccacc atgcccagct aaattttgta tttttagtag aggcagggtt 180
 tcattacatt gtaaaggctg ggttcgaact cttacctta ggtgatccac ccgccttagc 240
 cttcccaaag tgatgagatt acagatgtga gccacggtgc ccagccacag ttctggatca 300
 ctttttttgt cacaaaaaaa ggtattcata ataataaaat cacctgaaat ttatttggac 360
 actttactac ttttaciaag tactcagcag cagttagaca gagctggctt tccttgccctc 420
 ctgctcggtg gctgtatcat tccaggcaag tcactttgtc ttgcattgcc tccaatttcc 480
 tctcatttta aggactagca atttatacat cgantaagtt gaggggattg attagatcnc 540
 atacctaacc tnc 553

<210> 5792

<211> 556

<212> DNA

<213> Homo sapiens

<400> 5792

```

cggactcact gccagtcaga aggtctgctc caatgttggt taatgaattt acacgaaccg   60
caaggaaga tgttttagc aagcattttt aattcttggt atcaaagcgt ttttcatgga  120
tggttagtct ataagatttg caaagggttg aatgatgttt agacagagct cctggatctg  180
aatggaagga gcttctagtg ctctgtaaac catgggtaga acactgttct ttatctcatc  240
aggaggggtt ttggtagta gcaaatccat tttttagtag aaaattaaca aaatctggat  300
tggtcctgc tgcttaaaca caggccaag ttcaggaaga attaattga catattcttc  360
tttggtgcat tcctcagcaa taagtagaac attgggcaaa acaaaaggta ccatgtcagg  420
gtttacaaat tctgaagtca aacaaggcaa aattctctgc acaatgacac gcttgggcag  480
ttttgtaga accttggca gcctttgaaa aactggggat ttctgaagat tatctctttg  540
gaaaaaggga tnnaaa

```

556

<210> 5793

<211> 560

<212> DNA

<213> Homo sapiens

<400> 5793

```

gcaggcaatc catcagcatc tatcaaatag ttaaattgtat atgtcctttg acccaatcat   60
ttcccttcct ggtgactacc ctacagaaaca cttgtccata tatgtaaata tctgagaaca  120
agtgtgttta aggctatata gttatattat ttataatcca gaaataacaa aaatgtccaa  180
ccagaggga ctgattattg tacagtcatt tcacagaaaa atccctccat gcagacatta  240
aaaagaatgc agttgttctt tgcataatga tttctaaaac aagcaagggt tagaaccata  300
aacaaaagca gggaaatttt gaaaccataa gcttttgtaa agcccttctg taaagcagaa  360
taataccaca ctcatgcctg tggccagtac tgtggctgga acatcatggg cgcacaataa  420

```

atatgtgttg agtgggtgaa agcacttgca tcttactgtg gcaaacaggc caacaaaatg 480
cagatcatta gcaatggttt ggagaactag agcaaaaaca tacattccat taatttggct 540
ttcattcccc cgaaagggt 560

<210> 5794

<211> 554

<212> DNA

<213> Homo sapiens

<400> 5794

gcttttagct ttttattttt gtattaacag gagtcttatt acacataggt ctgataaaac 60
tggtttatga tcttcagtct gtttccagtg ctgcataact agataacgta tgaaggaaaa 120
acgacgacga acaaaaaatt aattgcttgg aagacttagt tgaatctatc catgaaaaca 180
gaatcaatta aacatgtatg tgttacttag actaaatata aataacccat ataatggta 240
gctcaaacat ctcaagtgtt tcagagaatg ttagaatcta ttgtttgaag tgtctattgt 300
actctatgca agttctgttt ccaaacatta gtattagttg gtgatatttc cccttcatag 360
ggaaggtaaa aaaggtttgt agagggtggca aacaatattt ggtttaaact agcaggagac 420
aaaggaattc caagaaaggc aaaaatcctt tcagtaagtt ttctgaggaa aatgcacaat 480
atcttcaaac ttgccagctg gtagctagta ggcagcaaat ctggatttat tctcaaggct 540
gctgctggat ttgc 554

<210> 5795

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5795

ccttgagaca gattattgct ctgtcgccca ggctggagtg cagtgggtgtg atctcagctc 60
actgcaacct caacttctg ggttcaagta attcttatgc ctccagcctcg cgagtagtag 120

ctgggattac aggcaagcac caccacgcct ggctaatttt tgtatttttg tagagatggg 180
 gtttcaccat gttgcccagg ttggtcttga actcctgacc tcaagtgacc caccgcctt 240
 gacctctcaa agtgctggga ttacaggcat gagccacat gcccggttt tacatgattg 300
 tattttaata tacagtgggt aaaagtgtgt gctaaaatgt atcatttatg gtcctaattt 360
 ggtattattg aaggagatg tcccttcaat atgggagatg ttcctttta ctctgactg 420
 atttgtttg ttggggcctt ataatgtcat agaaaatgtg cattttgagt ggtaaaaaa 480
 aaaaacagcc tatagttttt actctcaaag acttgggtta atataaggaa cngtantata 540
 cccgggttaa aac 553

<210> 5796

<211> 560

<212> DNA

<213> Homo sapiens

<400> 5796

ggaaaagatg agaaacgagg ctttatttgc tccaacagat attaaaagta tgagaaccac 60
 aaccatgaaa acaacagaag ctgatgtgag aaacaacact aaaattaaac agtgcagaca 120
 caggccagc gacaatgatt ttagcactca tacagggtgc atttcggtca gtgcatgatg 180
 attcagtggg cgaagcattt cagatccttg tctcatatca cacctcgaaa tacattcctg 240
 gtcaattaaa cactgaaacg tactcagaga aaaagagatg aaagtgtaaa caatctttgt 300
 gtgagaaagg actttccaag catgacctca aaggctagag cataagagtc ttcgttttaa 360
 aatgtgcagg catttctgat ttaaaaatgt aaactatagc aggttacatc aaaaaggaaa 420
 aaaatacagt taaatggcaa atgatgcatg aggaataatg atttacagtg aatatgttac 480
 aggtttgctg ngcttaatat gtaccaatat ctacaagcc aaccaaatat tttcaaaact 540
 aaatgccttc ttagataaga 560

<210> 5797

<211> 550

<212> DNA

<213> Homo sapiens

<400> 5797

```

gtagagacac agtctcgcta tggtgccag gctggcatg aactccggcc ttaaagctct 60
cacctcggtc tcccaaagca ttgggattac aggtgtaagc cactgtgccc agctaggaca 120
aaacttttga ctttgtcaag ccttaatttc ctcttctata aaatggagtt aagaagggt 180
ccttcctcac agattgtact gagtatttca tgagatgata tgtgtatgtc aggctgtgtc 240
tctccaggga tggctgcac aatattttgc tactattcac atactctttt tacagtatga 300
tggacattcc tctcactgac agatggggca caggtcaatt ccccttgaat ctagggacct 360
tgtgactatt tgaccagtag aatgtgcagg aagtgatgcc atgtgacttt tgagactagg 420
tcatctaaac gatacagctg ccacctgact ctactctct atactcgcct tggaatccag 480
tcaccatgtt gtgaggaagc tcaatctaac cgaacagatg tgggaacagc ccacatggan 540
aggaactgag 550

```

<210> 5798

<211> 498

<212> DNA

<213> Homo sapiens

<400> 5798

```

agatggagtc tcactcttgt tgcccaggct ggagtgcagt ggcatgatct cgactcactg 60
caacctccgg ctcccgggtt caagcgattc tcctgcctca gcctcctgag tagctgggat 120
tacaggtgca tgccaccatg cccagctaata tttttgtatt tttagtagag acgggggttc 180
accatgttgg tcaggctggt cttgaactcc tgacctcgtc atccacctgc ctcggcctcc 240
caaagtgctg ggattacagg cgtgagccac cgcgcccagc tcagggcctt tattttgtca 300
cgttgaaaaa acaatgagtt ggtaggagaa gcctcggatc caaggacaaa gacaatatca 360
ccaaatagct ccaaaattac aatgaggatc agaagcctgg aaggatgggg tggaggtgag 420
tggggatcan aatggaaaca tctttcctct ctctagcggc cagtttggng anggcaaggg 480
actngngcca tncnct 498

```

<210> 5799

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5799

```
gcacttataa tgcttttatt aancaggaac tctctggtgt tgagtaaaat gtgagcagat 60
aatgatggct ttttcacagn ctttatattg gnataattaa tctcaagtat aaangctttc 120
ctagcaataa agggngagca ttaagttttg ccataatngtt cacacatgta ggcgttttct 180
ccagtatgaa ttatcttacc tacaangaag ngngacaacc atttaaaggc tttatctcac 240
tcttcanatt tctaggattt ctcaccagta taattacttt natggttaga aaagttnag 300
gcgttgncaa aagtagncac atctttct 328
```

<210> 5800

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5800

```
agacttttga ctttattcag aaagtacatt tatacatttg ttccaaatgt gctaacatgg 60
ataatttgcg taacagaaaa ctcacattaa aattttaagg aaaaaaagag attaaacaca 120
aggttttattc ttaagtccaa ttcatattat tactggccca catgtagtca gagttcagcg 180
taattgaacc agatgttttt cctctttgca aaaaactgca tattttaata ctgaagttaa 240
agataaaaaa ctatgtttat gcatgtttct ttagtagat aagtaccata acctgtcca 300
tgaaaaagaa aattatcatt tacatggaaa cagcagccct tttcaaaata attaatgagc 360
ctaatttatt tggcaacca agttgctgac tttggtatgt gatgctctga taataggatc 420
ctacaaggga atatgttttt accaattata tgtgaaacaa caggaacctt tttaaatgnc 480
tcattttcct tttaaatgca aagtttataa ctgnggatgt gaaatcaaata taaaggcagt 540
```

tgtganctta agttatcccc ccn

563

<210> 5801

<211> 554

<212> DNA

<213> Homo sapiens

<400> 5801

gaaaactgca tggcatcatc ataattacta cttatctgac cttgtttgcc acttgtactt 60
 tggagaagac caatgggtctc cacactatta tttgatacta tgccaagtga gccacttggt 120
 tttccagaca aggatttctg tcctactatg tctggtaatg gtgacacaaa gttaaggtag 180
 tttttatctg tattctttct gcttcctttc ttaaagatca attttggcac cctcttctgc 240
 agttcatcta ttccagtgcc aattatgcct ccactggaag acacggtagg catttctact 300
 gagtaactct gcatgtttat attatttgaa atttgcgatt catttgtttt accggtcttc 360
 tgttccttat tttcaatagc tatgcttttt gactttgntt ttctccttga agaacttgga 420
 tttccctgag acaacacagc cnggattacc tatattggna tgnttgatga cccaggttct 480
 gcctagnngct cctttaacta ngacttcacc aaatgttccg cctgggcttc aacaatctat 540
 cagccttgna aaan 554

<210> 5802

<211> 548

<212> DNA

<213> Homo sapiens

<400> 5802

cagttcaaga aatttatatt caaaaatttt cttagaata cacatgattt tacaagatca 60
 ttcatcatag caccaagcct aatattcctt aatagaaaac agtcaaataa caaatactcc 120
 agttaattcc cacaggtata aattattcaa atagccattt atatcttaat ttacagtaat 180
 caataaataa gacggcacat tcatatattg tttataaaga tctttttttt taaaagcta 240

cagctatgta tatcctaaat agacaaaaat aatccttgta ctacaaaata acatttcatt 300
 ttctcaata gttttcttag agctctcagt aaaaactttc agacatagtc aattaagccc 360
 tgcacaatag ggaaacattc aatctgctca atagaccaga ctcccccaaa ataaaacaat 420
 gatcaccacc cactacaata tggctctgaac aatctcctnt ccaagtttag ttaagtctgt 480
 cctgaggatg tacagtaggg gaacgaccat ttttccngt tcacaatttg gctttggcgg 540
 anagaatn 548

<210> 5803

<211> 566

<212> DNA

<213> Homo sapiens

<400> 5803

gtctatccag ggggccttta atagctgaga agtgctgctc tttcagatgg gggtgccaag 60
 caggccggtg accccaacct ccacccctg cccctgagaa gagactgggc tgggccagag 120
 accaatccac gggggaaagg ccaccagcac ccatcaggct tcccactggc accctgaaaa 180
 cctgcccagg ctgggccgcc agcgtcgtcc acaggccttg gccagcgggg gccctcaggg 240
 aagcaacca gctcgcatt ggaaggccag gcagtcacct cgggtggctt gctgcggaag 300
 aaagcacaca ggaggagggg tacatcaca acagagctgg gggcggtatg caggcagagg 360
 ggccacaccc acctgttga tctctctgtg tcgttctttg gttacgattt cctctaggac 420
 ctgccatct cccttaataa gcctgggtgcg ccccgctca gggccacca ccttgcggt 480
 gatgctctgc cgggcattcc actcctnctt gggcatgggc ttcattgggt ggattcggga 540
 cttntgntca tncgntgga ctgggc 566

<210> 5804

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5804

```

gagacgaagt gtcgctcttg ttgcccaggc tagagtgcaa tggcacgata tcagctcacc 60
gcaacctccg cctcccaggc tcaagcaatt ctctgcctc agcctcccaa gtagctggga 120
ttacaggcat gtgccacat gcccgactaa tttttatat tttttagtag agacagggtt 180
tctccatgtt ggtcagactg gtctcaaact cccgatctca ggtgatccac acgcctcggc 240
ctcccaaagt gctgggatta caggcatgag ccactgcacc cggccgtcaa tttgcctttc 300
tttatgggtg tgggtgggac taagtcacag cagagtcacc taacagcctg gatgcacagg 360
actgaggaag gtaagtcaaa gagtgcaggc cttttctcta ctttctcagc acaaagaga 420
agagacacat tcttctctca gagtctgtg gngcttctgc taatacatgc agccttgggg 480
acttatcgac agcacaagc cagcatttct nctttctcag agaaacatta aggnacctgg 540
actggcgata gggtnctgg atn 563

```

<210> 5805

<211> 446

<212> DNA

<213> Homo sapiens

<400> 5805

```

cccagaatga attctcgtgt ttacttccag atttaatgac tttgacttta gtagtcatct 60
gaactattta ttttactttg ccagtaatat ttagacctta tatatctttc attatgccat 120
cttatcttct aatgtcaagt gaacagttgc taaactgtct tctgcattta tcacattaaa 180
aatgtctttc ttggaaaatc ttcttgatat gaataaagta tcttttagag ccatcattta 240
aagcaggttt ctctccaaca cgagtctgct gaggtggtgt gagctgtgaa ctctggctga 300
aggctttccc atacacactg caatgacatg gtttctgacc agtgtgagtt acctgatgtt 360
gaataagggt tgactttcca ctgaaggcgt ttccacattc ttgacattna tagggctttn 420
cccnagnatg cattatcnga ncttna 446

```

<210> 5806

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5806

```
catttataaa aggggtattta tttcttattc atgtcaagtc caataagaat tctactgccc 60
tactttttgt aatttacaac catctgtaat acctagtttc caagaacaat gcaacagaaa 120
cagaagtgaa ggaggagggc acaacagctt ttaaccatct cagtctggaa gtggttccaa 180
aaatgtctct tccttttaca atctattgtc cagtagtcac atgggctcaa tctaattgca 240
aagagaagcc ccaaaatata agaggacatg tggatatttg gagaacttaa attgtctctg 300
tcacagaaaa aaaggaggtt ccaaataagag aacaacagaa tgaaaacaac ttaggggcat 360
gggctggaaa agcttcccca aagcagtgac atttacgcta agatctaaag ggagaaagaa 420
ctcagccctt gnatgtttga aaggtaacca atatagttaa gaggttaagag gctaacacat 480
tattcaaggt ataaaatatg cattcctaac gnggcctgna taccatagat nctatttagc 540
ttngnaaacn tttatgggng c 561
```

<210> 5807

<211> 559

<212> DNA

<213> Homo sapiens

<400> 5807

```
cttcctggag tcgcttttgt tttctttctt cctcctttct aagattttct ttccataagt 60
tttcttttcc ttgctttgct ttccttgcag cctcatcttc tagtttcttt ttctgcatta 120
gttctaatacc tttcctttca atttccttca acttgtcacg tttgatctta taaagctggt 180
caagggtcaa ctgctgtgtg ttgtaggttt ctctcagttc ctttagttga ttgttaaaag 240
aatccatttc tgacagctta gatgcagttt ctttttcaag agcatctaac tgttctttta 300
gtctttggca taattcttcc ttttctaata attttttatg aagtaaactg acccctgaat 360
caggtgtggt actgaactgc atgtttttta ttctttcatt taataattgc ttctcaggta 420
ccagatagat aagcttattc tgatattcct gaagttcctg gtgaagtgtg tgattccata 480
```

antccaagt cacactgntt atccagaact ttcagctcag ctttggagtt gctttttgag 540
ccggacatcc ggaagctgg 559

<210> 5808

<211> 533

<212> DNA

<213> Homo sapiens

<400> 5808

gccaaactac cttgttttat tggattttga gtaaaaacat gaaccatgtc aaagtttcca 60
ggcagactcc taaaaagcat tagcagatct ggacccaggc aggccaggga cagggaggtc 120
cctctatcag gttttgaggc gggttgagcg ccgaggtagt gggggctggg agggtcgagc 180
cgtcaccttg ctgggtgttt tgcctgggt gttgggctgg gaggggtggc ggccgctgga 240
ggtgaacagg gctgtcaaag cgttccgggc gttgattgcg caccggcggc tcacaggtcg 300
ggtgggtggg ctggggttct tggccgcctt gtatttctgc aggttctcaa agtggcccag 360
ggacttgcag tgggagagct gtgcccctga gttgctgtga tagaacttgt gggcaaattgc 420
ggctgtgaat gtcctggggc tgcacctgtg gctggacctg tttaacggct ctngcttcct 480
gctgcaactt nacctgnctt gggcccctng gaatggncct nggggctgnc ctt 533

<210> 5809

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5809

aggcaaaact attttcattt tactatgatt ggcaaattat gatgtatttg attgataaat 60
ctcagattta tcagattgat tctagtctgt cttcatgtgg cagaatatgt gttgtcagga 120
gtgatttggt aattcagaaa agcagctgaa gaagcatgga aacttcccta caagtatatg 180
gccacagctg gctaagggtg gagacagtat tctatccttg ggcctcagac tcacatatgt 240

atgtacatac acatattatt cacccatatt tccttccttc tccccctccc catctgtaaa 300
 ctgataatcta aactttacaa attacagtta caagaaaagt tttgttccat ttgaaataca 360
 aaaaagatca ggagaagcaa tctgcttttt aattttactt atgcaggtaa gttttttaag 420
 gatacagtca atttggtttg gcacttttga actaagaggg gatcnggtca taaaaaaatc 480
 taccaactct nagecgaact gaaatgaggt ngacngaaag ggntcccatn cataaagggt 540
 ttaaaaatta ccaagnccaa ttt 563

<210> 5810

<211> 318

<212> DNA

<213> Homo sapiens

<400> 5810

caatcatgac atctttatta taccatagat gaatatngt taaataaaaa taggtacagc 60
 angngtncaa taagaccagt agttctcctt cagaactcta cccatttttc agaggaagga 120
 aacacttttc cagaatacaa ngctcaagaa atgtaagcca gatcccgtt gtatgaggta 180
 tcttaagtag tcagactctc aaaancagaa ngcagaataa nggngccaag agctggggca 240
 ggcaggggga aggggaaaag aggagttgtt cggtgggtat agaacttcng aattcangat 300
 ganaaagttc cggnggnc 318

<210> 5811

<211> 571

<212> DNA

<213> Homo sapiens

<400> 5811

cattgaaggg ttttactgct aatcactctg gggaaaacag aggcaggttg ggggagggat 60
 aacaagtaac aaacatgggg gagtgtgaag gtccctgggt catggctccc tgagggtttc 120
 cctttcattt ctaaggnggg acctcagatc tcttctccag accaaggagg ccccttccat 180

tgagaaggtc actcctccca cccagagat ctagaagcaa agttggggca caacaggtgg 240
 gaactagcag gaaactgcag tgcactccta cctaagcagt tcacagacaa tttggagaac 300
 cttcagacag tgacacccat ctcataagta cttcctcaaa ggccaggggg actgctgcct 360
 taataacatg agcatgttct gaggctaccc tatttctctt tcaccccaag aaagtaaagc 420
 caagactggg tcttctgact ttccaacacg agaaatttgg cctggaaaga aggcaagggg 480
 ttttatttca gangtccttc ctcaggactt tctngagaan ctgactttan aggctnttcc 540
 aaaaccntt ttcaaagngg ggatggaagg g 571

<210> 5812

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5812

gcaattcana aatgttttaa tgtatttaga agcataaata ccaaacctgt gctccaaagt 60
 taacaagtat gtctctaaac tctagatctg atttttacag ccacacttga gacaatgacg 120
 taaacttaaa ctttactttt aatggcttaa actagcacta aaatgtttta tgtctcactt 180
 aggagatttc aaataaagtt ttacatcgc tcatgtttac taactcgaca atctgagctg 240
 tcctgttttc ccagggtgta aatatcattt aactgggaaa tgaaagcaat aaaaaaatc 300
 tcaaacatga actaccatta ctttcctata aacatcttaa cattatagaa aatttccaat 360
 tatgtcaaaa tcagaagggtg aaacccttag ctttccatgt tacacctgac ttagtactac 420
 tcaagtatgg gaaaaagggtc ctggagaata atggttccaa tacttttcat tggcatctta 480
 attggcatca tgtagaagtg gaaaantgta gaggataaga gcnaaggct tagnaattctc 540
 cggacnnatg gng 553

<210> 5813

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5813

```

gtagagatga ggtcttgctg tattgcccag gctgctcttg agctcctggc ttcaagccat 60
cctcctgtct tggtttccca aagtgctggg actataggtg tgactcacca tgcctggcct 120
acatccagtt taatttatac tacactgtgg gtttagtcct caaacatggt tttgttttac 180
atataaaaaat ttgaggtaaa agaacatitt tacattgggc aataatggta catttaaaca 240
atggacgact atatccatta aaatcgtggt gtggaagaat attcagtgc atggaaagac 300
tgactcaagg gcaagtgaag cgtgtcaaga gtctgttagg tactagacac tgtaaactgg 360
gtcttggtg tgttacttgc ttacatcctc catcatgtga tcttttagat aacaaaatcg 420
agatcatagg gataatgggg tgggctgatt gaaagaacag aacttgggcc acacttctag 480
atgcctgnga cttttctgca tctattcaga tattaaggaa ttgnttatgn aaaccatggg 540
ggttgaatgc taaaggaccc tcc 563

```

<210> 5814

<211> 555

<212> DNA

<213> Homo sapiens

<400> 5814

```

gagacagagt cttgctctct gtcctgggct ggagtgcagt ggtgcagtct gtcactgca 60
acctccgcct cccgaagatt caagcaattc ttgggcctca gtctcctgaa tagctgaagt 120
tacagggtgtg cgccaccatg tctggcaaat ttttgtatit ttagtacaga tggggttttg 180
ccatgtttggc caggcaggtc ttgaactcct ggccttgtga tctgcctgcc tcggcctacc 240
aaagtgttgg gattataggtc ttgagccact gcgccaggcc aatcttaaca ttttaattgt 300
tgttttgatt ctcttggttg tattacacta aaaacgtatt tatgtgtaaa aatttaaaag 360
cagcctgcat aactcaccca actatttgat aaatatcttc agattttcct tgggtgaacc 420
tcagtatcca agcacctggg tttgctttta attgaaaata ccccttttaa gatgagaaaa 480
aaataatcat tgggtaatat gactaaaaan ccattgaaat gntcatgaat acccgagggg 540
actaangaaa ggttt 555

```

<210> 5815

<211> 577

<212> DNA

<213> Homo sapiens

<400> 5815

```

ctttttttca agtctggcaa aagcttgcaa aattgcttcc atttttcttt cttctcttgt   60
catcttcctt ttcctttctg caatctgctc ctctgattcc atttctactt cattactaat  120
aggagttttt tcttctatat catcaataaa atctgggtcc tgattatttg atactgatag  180
tctcagtgga gaaagctttc ttgttttagt ttctgggctc ttcattttgt tggcgcctcc  240
ttcacaatcc aaagtaatat tctgattttg tgtatctttt tcttttgaaa tatcttcgtc  300
tttttttcc tttttccgtc tggcttcata accactattg atattttcca tggattcaga  360
actacgtttt agaacagggc actctgggtt ttctttgagg catgcacagt ccaccttgta  420
cttacaattt ccatagtcaa aaatcaaagg caaataagta atttcaattt ccctttggaa  480
atactggngt atngaataaa atataaagga tgnatgggg nccatcttgg aaattcatgc  540
ctcacctctg gcattgggng tccaaaaacc gcctgag                               577

```

<210> 5816

<211> 538

<212> DNA

<213> Homo sapiens

<400> 5816

```

gagacggagt ttgtctgttc cccaggctgg agtgcagtgg tgctatctcg gctcactgca   60
agctccgccc cccgggggtc acgccattct cctgcctcag cctcccaagt agctgagact  120
acaggtgcct gccaccttgc ccggctaatt ttttgtattt tagtagagac gaggtttcac  180
catgttagcc aggatggtct caatctcctg acctcgtgat ccaccgcct tggcctccca  240
aagtgtggg attacagatg tgagccacca cgcccggctg gcagttcttt atagcagcat  300

```

gagaatggac taatatagta cattgagtgg agtgctgcta taaagagacc caaaaatgta 360
gaagcaactt tggaactggg taacaagcag aggttgaaag tttggagggc tcagaagaag 420
acaggaaggt gtgggaaagg tttggaactt tctaagagac ttggtgaaan gggtttgccc 480
caaaatgcta ataggggatn tggccaatga aannccaggc tgnatttggt tttcanan 538

<210> 5817

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5817

cctttcaaac actgtggctt acttgtttac tcaactaaga aagaaaaagc aaccttatta 60
tagagattag caagagatga agaaaattat agggaggctg ccctggccca aaggtctgct 120
aatggcttct gcagggagga tgaggatggg gctaggttaa ctgcttgtct ccactacaga 180
ccagagaacg tccatgcgat gcctcttata agtgaggtag atgatcatcc tcttgccaga 240
ggtatcgagt gccagcccac agcacagcag agcaaaaaag tttaaagtag gtcaagttca 300
aaattatata aaggagataa gagatgggag gcaaaggctc cagaagagga acagaggcgg 360
aaggaagaga agctccaagg tgacgcccac tctaggacaa gatgatgggg agcttgcttc 420
tgtcctgtca gacatacctc ctgccaccac gaggcagctga atgaggggtg ggaanggaag 480
aaaagcccng agtgaatttt tggaagaaga agtggaaggc caggaatccc ttanntcctg 540
ggaacctttt gggggtttng g 561

<210> 5818

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5818

acatagaata caattcaaca ttacattgat tccttttaggc ttcgggtag atcaaattct 60

cccaaacaga atagccatgg ggagcatgag acaatctagt gaggcctaaaa cacggaagct 120
 ggttctgtcc tttagccac tgacgtgaaa agagtcattg caggatgatgc ttgtttgcag 180
 aaatgtggag tctgacctgg gctgcatttc cagatcaggt gcatccgtac ctgagccttc 240
 catggggtaa caggcattgg caaaaaatgt cctgcctcag tgtgaccctg gaacctttcc 300
 agcccacact catgtggagg atcccagtg ggatgacgat gtttggggat atttcctcat 360
 atttcttttg ctgagaaact agcttgagtg ggcagggaaat ggaggcaggt actgctagag 420
 tctgcaaagt gaggccagaa cctggacttc tagagttggg gggtatncct aaacttcctt 480
 tcactaagac attcatgata gccagtattc caaaggggnc cttcttataa nactnggccc 540
 aggcttcaan ttctggggan gagg 564

<210> 5819

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5819

aaaagttaga actaatttat ttaatcacag atatttagta tactcaataa tgcactaaca 60
 atttctttta aaaaacacta atactgtaca gtatttctgt gtttttagttt ttcccacagc 120
 tgttgaaaat ttcagccttg atttgaaaca tgacctgcat gacaggctat aagttgtcaa 180
 tagttctttt tctttggaaa agtacagttg tggcatttac tcacttttagc agatagctaa 240
 aagggaaaaa taaggaaaaa tatacactgg acctgcagtt aagtttttga caatgccaag 300
 gatcaaaaac agatgaaaca acatttgctg aagatgaaaa ggtattgcat tggctttaat 360
 agatgttgcc atctctgggt gaggatgctg actgagcctg ttctgtgtct tcacacctc 420
 tatttgnttc ttcttctacg acagaccttc aagagacaag atccatgtag taagccacac 480
 taagnccctt tgcccttctt aatcntctgg aggctcttnc ctggggacnt ttgnccaaaa 540
 tacttaggtt accaatnttt anct 564

<210> 5820

<211> 325

<212> DNA

<213> Homo sapiens

<400> 5820

```
acncggggag agatttaatt tacatagcag ccacttgggg nccagtcana gctggggcag   60
ngggggaatn tataacccca gagggtnccc cccanacccc cacccccggg agaccagtcc  120
tcaccaaccc ttggatgggc tccaaggtt gngcaaaana tgctccagtc aaaaggatag  180
agacatttgg gaataaggct gnccccaagt tgggggaagt ccacggcctg gagnggnggc  240
ctacatgggg gccaggggt ctgananacc agtccatgtc ctgggcgagt cctcagcctg  300
ggggccctan aggaagcctt ngngg                                           325
```

<210> 5821

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5821

```
aaaacataat acatttttat ttctttaaaa acgtatgaca aaatttcttc tgccatcggc   60
catgctcaga tttatacatt ataaaatgat ttaattccct aaagtacaaa aaagaatggc  120
tgaatctcca aagagttgat aaagactgaa gatgtttata aggcatgctt atgtatacta  180
tttcaagcca tctacaggac ttgagacagg aatgtttagt gtttgcaaag ccacagtcac  240
tgagccagac tttgtggtga tccagagatc ctttcatttc acagaactgt ccttgacggc  300
ttctcccaat aaagatttac aaccttatct cttggctgtg gcagtatgag agggctcttct  360
ttcagttacat atactaaagc ttcattggag tagccacgct taggaagtac caagtaaattg  420
acaacataag gccaaatgca ggcagcaggt atttttcaat aatgaattac aggggcttca  480
agaattcnac angagaaagn gattttcaca gngcttgaaa agcttganaa tgggattatt  540
gccaaannga aaagggt                                           557
```

<210> 5822

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5822

```

gatgcaacat tgcttttatt gggggtagg aacatatgac aaagtcacat aaaatgtcaa 60
caaagtcaca ctttgtgctt ggctgctctt taaaaaaaaa aaaaaccctg tttatttatg 120
aactcactca atgagaacta tgtgagatgt ggccaacaat tatcatgctt aaaacaggac 180
ggccagagcc atgaggagat tgaagtctga caatgctagc tagctaagtg gaaatttacc 240
attgtcaa atcagatact tccacacatt tagatgtttg tccataagta gaccagctt 300
agctgactcc tttgagaaag aattgngtct caaaccctg ttattcagct ggccatatta 360
ttaatcatta ctaa atgcca gccacatgca aaggggatgg aaaagaagaa tgagatttgc 420
tcagtttttag ctttctgngg ctgaagtatt tttgagtcag ttacatggat acatgaggat 480
tatagtaggg aaatgactgg atattttttaa aaacctaagt nctatgggaa caggcntggn 540
ttaaccattn ggncnna 557

```

<210> 5823

<211> 536

<212> DNA

<213> Homo sapiens

<400> 5823

```

gttaaaaaac atgttttatt tacaatatgt acaatcagga acatatttta aaaccattat 60
cattaaaata aatgaagatc ataaatcaca atttagtttg ttcttagtgt atatactcac 120
attaaaatat aaagaacata taccaaaaag agccaaaagt gtgcattttg ctaaaacctg 180
gtatatacat attccattgg aaaaaagcaa tcaaaaatga cttaaaccac aactaagttc 240
ctgtgatgtg tagtaaccat tatattgttt gtatgaggta gtaactaaat tattttggcc 300
atgtattaat actctaagtc aaaagaaata tgaaaaggat cataaaataa ggccaacaaa 360
agtaaaaatt ccaagagaaa tttgaaccac ttactctat gggaatggta cagttcttca 420

```

gtgngatcat atgaaatggt tagtgaggac tctttaataa tgctaattaa ttctttgggc 480
aactgggaat tcntggncnc caattggcng gatttctatc atgggacccg ttttnn 536

<210> 5824

<211> 507

<212> DNA

<213> Homo sapiens

<400> 5824

gtagagacag ggtctcaaac ccctgggttc aagtgatcct cctgcctcag cctcccaatg 60
tgctgagatt ataggcgtga gccaccgtgc ctggcctgca aactttataa acagaattct 120
ggctaaagcc tccagtataa atgggcaaag tagatgtctt aatttatatt atgctgctat 180
aacagaatat ctgagactcg gtaatttatg aagaaaataa acgtatttct tatagttctg 240
gctgagaagt acaagaccat gaggtctgca tctgataagg gacttcattt tacatcatcc 300
caggtcagag ggcagaagag caagagacgg tgcacactcc tttataacta acccactccc 360
aaataaagac agtaatccat tcacaggggc agaccctgca tgaccggaat cacctaatag 420
gccccaaactt ccgacactat tgcaccangg attaaggttt ctnacaccca actttggaga 480
accntttca accncattan ngggncg 507

<210> 5825

<211> 529

<212> DNA

<213> Homo sapiens

<400> 5825

gagatgaagt ttccctctgt caccaggctg gagtgcagtg gtgcgatctc ggcttactgc 60
aacctctgcc tccctgggtc aagcgactct cctgcctcag cctcccgagt agctgggact 120
acagatgtgt gccaccacgc ccagctaatt tttgtagttt tagtagagac ggggtttcgc 180
catgttggct aggatggtct caatcttttg acctcgtgat ccaccgcct cggcctccca 240

aagtgtggc attacaagcg tgagccactg tgcccagcca gctctttata gttaagagg 300
aaggataaac cttagagat cacaacacta ttttgtgtc agggatccac aagactgcct 360
ccatgtttgg agatttgcta gaaggactca tgggatcagc ttagggttgt aatgggctaa 420
gatttattac tagnaacatag natggatata tagnagaaag atctcaatgg caaaagacac 480
tgnccgagtc tggaaaaatt cctggaccgc gtttcttatg nggcngggc 529

<210> 5826

<211> 530

<212> DNA

<213> Homo sapiens

<400> 5826

aaccctgtgg cacttaccac ctatcctact atatatttaa tatgcttatt tcctactgac 60
tgcctgtctc cccttatcaa ggccaaggct ctcaaggcca gggatttggg tctcatttgt 120
tcactgatgt atccaaagt cctagaaagg tgcctgatac atagcaggcc tcagtacgtc 180
tttgtaaagt atcggaatga atgtatcatc aatcaaaaca taatagtttc catttattgg 240
atgtcgtcta tgtgccaggc cactgcgatg aaaattttac aggcctgac ttactattcc 300
tcacaaaaat ctccaagaa aagagccttt attatgacta tcttatgaaa aaagacactg 360
tagtcctgca gggccaatta agatgaccaa gaccaccag gtacagagt ggagaactga 420
gcctcagact agttctgtc aatgggaaca tgaccagatc ctgctggaag aaccnagggt 480
cgcttctggc aaataacgcc gcaacccttt tngtnattc ncttttcnn 530

<210> 5827

<211> 524

<212> DNA

<213> Homo sapiens

<400> 5827

ggctattgta tactaacatg atagaatgtt ttgatgaaaa acaggaccca gtagaattaa 60

gcaaagaaga aaaatgtact gaaattttta caaatcagta ttaaaatatt ttggtagttt 120
 gtttcaatac ttaatcttta aatctttcta attgtgttta tccacacaga tcagatttat 180
 cacagatctt tattttttcc attatattag attttgcttc tgttgaataa aataaactta 240
 tgatgaaaag tcttataaaa aaacatgtct tttgttacct ttgcaaaatc aagactccga 300
 atccagtcta atctgtctcc tcccaagcaa aaaatcttgg ggaaaaagct gaaatgctat 360
 tacttgaaaa tttatgtaag attgtacatt tactttccaa ccagtctgaa ggctgaggag 420
 tttgcaagga aagcaagaaa aagttaaaat gnctaaacca aagcctgact gggttcaaaa 480
 ctaggtgctt aaataccaag ggcccantgg gcnnttaaaa acan 524

<210> 5828

<211> 512

<212> DNA

<213> Homo sapiens

<400> 5828

gacaactgac ttgtcatctt tattaatttt taaaaatgca tgtctcctaa tatgaaaagg 60
 ttgattttca ctttattgtg tgctttgcac atttacagca gcaacaggaa gagcttctac 120
 tgaatagatt ttagtcttca aaaatgtgac tgcattctcc atctctagtt tgtccatctc 180
 ccagttattg accaagatca catgaaaacc cattgcattc aaatgccgca ttttcatagc 240
 aaggaatcct ctgggggtggc ttgaacccaa acaataagca gatctggaaa cacatagcac 300
 agctactctt tgaatatctg tagcagaagt tgtatcacat cagaaagtgg tagcacttga 360
 ttctgttag tgtccattct gatttcaaaa tcaatatgat aattgtgtgg caagtgcaca 420
 tcctttgaga agtgtccttc accttccana aggctggtca ncaccttgn cacctttgca 480
 tttggatggg acnattgnaa gttccgcngg na 512

<210> 5829

<211> 531

<212> DNA

<213> Homo sapiens

<400> 5829

```

ataagcagtt tttaatccat aaatacaaca ggcatttggt attttggcca tcagaaaaca 60
aaagttgtag tatcagtaaa ggtctgagat ggttcacttt tgtagattca attcagtgtg 120
tttaagggtta acaaaggctg acattgaaat gtttaaagat aggcaaaaat tcacattaaa 180
aaaaacccta tatttctatt tagagtaaca gtaggcagta tgattccaaa agttaaaaat 240
tatttcacaa cctgtagctt cagcttggca aacagcttag attccaaaac tgattcatct 300
ctattaaaat gtaagcactt aaaaaaagag catgtctgtg tatatagaca tatattttaa 360
aggaatcaga taatctttga agcagcctta gtgtttcctt taaatttgtc tggaaatgac 420
cattgnatta gcttcacaga aaggactngc ccagcttctt tggcttaagg ntaacatggg 480
ngatcatttg gctnaagctt aaaaggnccc accagatgtt aaccgggggg g 531

```

<210> 5830

<211> 529

<212> DNA

<213> Homo sapiens

<400> 5830

```

aggaatattt acaccacaga aatcagcaaa cactacaaat cagaactttt accccaaaga 60
actagttttt aaaacattca ccaacacatc atcagcttca gtttccacct ctctcaaaca 120
ggactaataa caccaaccct gcaaatatgt tgtaaggact tcaaataata tcagtaaaac 180
acctagcaaa attctagtca cataaaaggc acttagtatg tggatatatag caaaaagtta 240
tggtactata aatgaaatct ggctatatga aagtagagca taaataataa gtaatgcagt 300
cattcatgta taagtataat aaagcaattg aactttagta gaggtgccgg gtcctttagg 360
atttttaaat gaaaagaatt aatacagaat tccatatact tttcctcaat taatgagaac 420
aatcttcttt ttgcatcttc tcctattttc caggnttctt ttttaattatg anctcttggg 480
gtcaaanttg gcaagcactt ctacctattc cattaaacna acngnttgg 529

```

<210> 5831

<211> 501

<212> DNA

<213> Homo sapiens

<400> 5831

```
cctttttaga gactctgttg cccagactag ggtgcagtga tgcgatcatg gctcactgca 60
gcctcgaact cctgggctat atgcgaccc gccacctcag cctcccaagc tgagactata 120
gacccacacc atcacgcctg gctaattctt tttttctaata acatgggggtt ttcttacatt 180
gtcctggccg atctgcaact cctgggctca agcaatcctt ccgaaagtcc tgggactaca 240
ggtgtgagcc accacgctca gccttttttt ccttattact gtactaggga cttttgtggc 300
ttttccacaa tgagacttag tagagaaatg acagcttccc tcggccctat cctgaaatac 360
actaactagc tcttctctgc cagggtacc gttttctccc taacctttgc agatgtatgt 420
atccatataa atgnttctat ttcaacaaac tgtagaaagn atncagnctg nacagggtcc 480
cttatnaagg tattaccngg g 501
```

<210> 5832

<211> 516

<212> DNA

<213> Homo sapiens

<400> 5832

```
aacttaggtg ctcttttgcg ctatatactt taattcatgc aaaagtgata gaggactgga 60
cttgaggctc tacagaggcc tttctgagaa agctgtgtag ctccttactc tggcgaagaa 120
caaggggggtg tacatcttgt caatctcaaa agcactgact gcagtctcac cagttgattt 180
gtaagtaatg tgacaagaat gatgtatcca gatgagtttg ttgaacctct ggtgaccact 240
ggaacatagc ttagcccca catgaaaact ctgatctgct tcttgtacag ggacacgacg 300
aaaatatctg tatttatagt caagtggttt ttcttctttt ttcttagtta ttacagcaaa 360
tactttggtc tgattgtctg tgtcttgtga caagcgatag tgaccagta gaattgcatc 420
agtctggna ttcctagttc ttaaactggg aacaatggac tgaggctctt taagggntgc 480
```


aacatnatna catgggcctn gggaagnaac ttttgn

516

<210> 5833

<211> 521

<212> DNA

<213> Homo sapiens

<400> 5833

gaggctaaga ttacatacat ttccatgtat acatagaaac ttgttgtatt agtcagcttg 60
 ggctgagttg tgttgcaata atatcccca aatcttcagg gcttacaaca ataacggctt 120
 ctctctggct tgtgttcatt ccctttgaag atcagctgca gccctgctcc atgttctctt 180
 tatgatgaaa tggaccaaatt ccagaaacat ggctaataag cctgatgtca atggagcagg 240
 aagaatacct tctcacaggg agggccacca ggcaggccct ctccagttgc tagtgcattt 300
 tgtctgttgg cctcaaagct tggctcaaat tgtcaggcca atggaaagac tgaatgcttt 360
 gcctccaggc aaaattgtgg cctgcagagg gtggaccctg cattgcatct caacgagaac 420
 ggaaagctca ctcagcatgc tgcagncttt catactgatt ttgacataaa acatnaggcg 480
 ggaattcnct tttggctttg cagnaaattg gggngganc n 521

<210> 5834

<211> 499

<212> DNA

<213> Homo sapiens

<400> 5834

ctgagacaag agtttcactc ttgttgccca agctggagtg caatgggtgca atctcggctc 60
 actgcaacct ccaactcccg ggttcaagcg attctctcac gtcagcctcc cgagtagctg 120
 ggattacagg cacctgccac catgccccagc taatttttgt attttcagta gagacggggt 180
 ttcaccatgt tggccagtct ggtcttgaag ccctgacctc aggtgatccg cctgcctcag 240
 cctcccaaatt tgctgggatt acaggcgtga gccaatgtgc ccagccagtt gcatattctt 300

gacccaaaca cagacagttc ccccaagttc aaaaccacaa cgagtagccc acacgaaggc 360
 atactctgag ggttgtttca ctgttacagc agtacatatt tcgaagagac aacagattcc 420
 atttcagatg cttctcaaga aagaaaaagt ctttgacaga atctctactc cangnctctc 480
 tctctctttt ttttnnnnn 499

<210> 5835

<211> 531

<212> DNA

<213> Homo sapiens

<400> 5835

gagacggagt ctgctctgt cgcccaggct gaagtgcagt ggtgcaatct cagctcactg 60
 caacctccac ctctgggtt caagcggttc tcctacctca gcctcccag tagctgggat 120
 tacaggcgtg ccaccacacc cagctaattt ttgtatTTTT agtagagacg gggtttcacc 180
 atgttggcca ggctggtctc caattcctga ccttaggnga tccacctgcg ctggcctccc 240
 aaagngctgg gattacaggc atgagccacc gngcccaacc ttttttctt tatgtcttct 300
 gtagctcatg aaactatTTG gactttctct ccctacaatt aataggattt tacttctatt 360
 tcattttcta ggcataaaaa tgctattgat tttggtgaat ctaccagatn gcaaggaatt 420
 ttagaacttt tttttttcc ttttttcgga natagggggc ttactctgtt ggccaagctn 480
 gaacncaang ggggtaaact taagttactg gnaccttcaa tttncagnt t 531

<210> 5836

<211> 552

<212> DNA

<213> Homo sapiens

<400> 5836

gagacagagc cttggtgtgt cgcccaggcg acaaaagtgc taggattaca ggcatgagct 60
 accgtgcctg gcctgtctat atttttaaaa agcatttgtc ttaccttcaa cccgtgattc 120

caagtgttta tccaactctg aatctttttt caccgcttca tctgagacct tgggagcatt 180
 tgaaaagcaa actagtacaa tactcatgtt atctcgactt cccttgnngta aacaagtgtc 240
 cactacccaa ttgcacacat tttccagggtc atcagatacc tcaagcctag atttaacata 300
 ttcacagagc tcctcattac tcataacatc ccagatccca tcacaagcca agatgataaa 360
 ttcacacctt tctgctctta aaatttcata aacctcaggc tctggagaaa caagttgttc 420
 tgttggggccc ttgccatcaa cacacttgta atcatagtcc cccagagcac gaggatactg 480
 ntaatggacc attaacacgg tggatcaata cgctgcttcc tggatttttg gntcgtcct 540
 tttccctggg at 552

<210> 5837

<211> 525

<212> DNA

<213> Homo sapiens

<400> 5837

canatggagt ctcaccctgn ggcccaggct ggagtgcagt ggcgcaatct cggntcactg 60
 caagctccac ctcccagggt catgccattc tcctgcctca gcctccctag tagctgggac 120
 tacaggcacc caccaccag cccagctaat ttttttgta ttttttagtag agacgggggtt 180
 tcaactgngtt agccanaatg gtcttgatct cctgacctca tgatccacct gcctcggcct 240
 cccaaagngc tgggattaca ggcatgagcc actgcgcctg gccaaagtta ttattcttta 300
 gtatcttgng tctacatctg agtatatttg gttttcattc ccctgggagg ataaagtaaa 360
 ctggaaaagc atgaactccc canggaaatg tttctgtctc caggtatttt cctactctaa 420
 ttcaagtcct tccataaggn cctgacccca gcacaagtca ngnactaata gnaccttnca 480
 aatgaatncc ccagtttgaa ttcaanggga aaatcaaata ccttt 525

<210> 5838

<211> 185

<212> DNA

<213> Homo sapiens

<400> 5838

gttgtttttg gtgtttttaa ttgtttttgt taatgtaaaa acagaaccat cacagccgct 60
cagctctata acccatccag cccaagactg ttctagtgnn gaaaccaaga gtagacagga 120
aggggacncg agggatggng ncgcttcagc tgaaccctaa ganccncttt ctnccttcc 180
tccgg 185

<210> 5839

<211> 480

<212> DNA

<213> Homo sapiens

<400> 5839

ggtatttact tgggaaaaaa agatgctaca aaaaagagac atgaattaag aaaatatttc 60
gcatgtaaga caagtgcaga taaaaatgaa aaatgtgccg ggtggtgatc tgacagttcc 120
tgggatatca gtaacactga aaatgcctag aaaacaacct tttcccagtg ttgggggaag 180
ggttctattc ctgtagagtc caaaaacaat tttccacat ttgaaaaca tctggttgta 240
ttttggcaaa ctatggtagc tatcagcttt gaatccatat gtatttaatt ttgctggagg 300
ctggataatt aaaaccaata taactgaaaa taaaacaaca aaaagctttt ttcaccctct 360
aagagcatag aaatctacac ctgggttatac tggattccag ntgatatggg accagccagn 420
atactccaga antactcacc aatanttttg nntctaattt ccacnttatac tcatttattg 480

<210> 5840

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5840

gattgatcat taaggaagtt agaggaataa aaacacagta aaaggtttta aacattaagg 60

aacatttttc aggtataaat tttataaata caaaacaaat tcacaaatta ctctcaatac 120
 taaataaata tctagttaat aaacttggac ttaataacctg cagccagcac tggtacagca 180
 cttcaagggtt ataagattgg attcattcat gtgtagtggt gaaagaatgt actcaaacia 240
 ttaattaaga cataaacacc ttttctaaac tgtgctatag cggaagactc atccatgtag 300
 ataactctcc cttaatacca ccactttaaa aaaaaatcat caataacaaa ataatcgtg 360
 ggtgaaaaaa tattttccaa gatctctgga cacatgaatg atctcaaaaa tgtacaaaaa 420
 cctctgtaaa ccagtactgn atccaatata tctatcaaac ttattagata ctggaacaaa 480
 actggagcna anggatattt ttcctacatt ctcccagggg cttaatatata aaattnggga 540
 atatagngcn nnc 553

<210> 5841

<211> 541

<212> DNA

<213> Homo sapiens

<400> 5841

ggactgagac catcaaaagg gaagaattag gagggttcct ttggtttgct caggtcccgg 60
 cctgaaaaac atggctctga catccaagat gcctgctgct ctgtccctga cttcagtctg 120
 aacccccacc tgccccacc aaggccacgc agatgggttac tgtgggaaca atcccagcct 180
 tctatctccc cggggcctcc ctccctgctc tgcttccctc ccctgagcac ttgaaacatc 240
 gccagctttg ctaccttcag tcccgccacc acggggctct ttcaaggctg tgggatcggc 300
 agaagagtaa ccaccaccgc atcccagaaa cactgcccag gaaaaactgc tccatctgct 360
 cctctgcccc agggccagca ggagggggaag gaaggggctg gaggtctctg cagggaagcc 420
 ttgggggttcc tcctgatatt gggactgctg cctggccagn ttctactctg ntgcaagaat 480
 ctggacaggc aagantactt tntcccccaa gggttttttn taacggttga gcttactggt 540
 t 541

<210> 5842

<211> 542

<212> DNA

<213> Homo sapiens

<400> 5842

```

atTTTTtga gatggagttt tgcttggtgc ccaggctgga gtgcaatggc gtgatctcgg 60
ctcactgcaa tctctgcctc ctgggttcaa gcaattctcc tgccttagcc tcccagtag 120
ctgggattac aggcatgcgc caccacacct ggctaatttt atatttttag tagagacagg 180
gtttctccat gttcgtcagg ttggtctcga actcccaacc tcaggtgata cgtatgcctt 240
gacctcccaa agtgggaggg ttgcttgagg ctaggagttt gagatcagcc tggggaacat 300
agtgagaccc tgtgtattta aaaaaaaaaa aaaaaaatag ctgggcatgg tgggtgtgtg 360
tctgtaatcc tggtacttg ggaggctgag acaggaggat gatctcttga gccaggaag 420
ttcacaactg cagtgaggat atgaatcgta ccattggatt ggaccatttg cctgggggac 480
anaagtggga acccttgggg cttcggaaaa aaggttacnt ntaatggaat taattgggaa 540
tt 542

```

<210> 5843

<211> 476

<212> DNA

<213> Homo sapiens

<400> 5843

```

aaacacaggt caccatacac taattttcaa gtccgtatca gaaggaatat ctgttaaaaa 60
caaaaacaaa aaccatgatt caacagaaaa tgtgacagat tccttaggtg caactttaga 120
aacctaagtt tcaaaggaga aaaacagtag ttactccagg aattttaact cactaaccac 180
agttttatca tggctctgta agacagaaaa atggaacaaa atgtatatag ctgttggcga 240
tacgagcctt gnggctcaaa ttgcatacca aacatgggat ggagtaaggc tgatggctag 300
aggtaatcac ctctaagaga aatgaactgg gaaatgattt ataatctacc ctacanggat 360
atactgctag gtccattta gagtngtcca gctttcccta tgggaaggcc caatgggagg 420
tcctantgc aacatnacag ggncttcctt attccttttt ttengaagna ttaagg 476

```

<210> 5844

<211> 548

<212> DNA

<213> Homo sapiens

<400> 5844

```
gttcattttt taaagagatt aagctataag caaacacaca tacaacattt catcattcaa 60
ttcaggttgc gttttaagaa agtccttccgt gctggtaccc tgttttgttc aatttttttc 120
tgcataaact aaattggtat ctgaaaggct tcatagaaaa tagaaacttt caactttttt 180
ttcctacaaa gaaaaacaaa tagtatccaa aatattaagc attaattggt tgccaatttt 240
ttcttaataa ttttacaac ataggaagggt ggttttcata atgttcataa caaagaattg 300
cattttctgt cttagcactg actacgtcaa tgacatcttt tgtccttggt ccaagagggt 360
cagtttgtgt agccaccatc agagctatag gaggacgtgg gaccaagtaa agatgctggc 420
tccttgcgag cccaagggtg nccatcatgn tcatgtgggg gcaccactac acccccaaag 480
agcttctaag tgctttcttc antaatggnc catcagagta agtaggtttg ggctataaga 540
aagccant 548
```

<210> 5845

<211> 543

<212> DNA

<213> Homo sapiens

<400> 5845

```
ctgcagacaa gtaaaccctt tatttttaaac cacaatagt cagcaggtgg ccacaactat 60
ccatgtttca ttaaaatcac ataaaaccta ggtacaaaag caccactgat tattgctcta 120
gaaaaactgc atgaaaaatt caaatatgca cagtaaaaac accacagtat gcacaggact 180
aaattttaaa gcaagtgcgt ggaatgctga atcaatctta cacacagctt ccaatattta 240
actgatattt attttacttg aggatgatgt aaatttccaa aaagcatgac tatgagacga 300
```

taaaatgtcc atccttatat attttcgtat gccaaactagt agagtcctaa aaaattagca 360
 tttaaaaaat acttggtaaa aatagctttt aaaagttgtc ccaagagata cntanaatca 420
 accccaattt ttcattggaca attcattctc cctcgggtatc tacagattca gttttcttgn 480
 gccttcennt tccaggtttc ctggnntttc ctncctnttc ccttttagca cctttgntaa 540
 atn 543

<210> 5846

<211> 541

<212> DNA

<213> Homo sapiens

<400> 5846

cttgaaatgg agtttcactc ttgttgacaca ggctggagtg caatgggtgca atctcagctc 60
 actgcaacct ccacctccta ggttcaagac attctcctgc ctcagccttc caagtagctg 120
 ggattacagg catgcaccac cactcccagc aaattttgta tttttcatag agacaagggtt 180
 tcaccatggt gtctaggctg gtctcaaact cctgacctca ggtgatccac atgcctcggc 240
 ctcccaaagt gctgggatta caggcgtgag ccaccgtgcc cggcctanac tgtgcatatt 300
 ctcttgaagt gtgtgtataa taaacaaatt aacaaaaaaaa aaagaactgc tttaaaatgt 360
 atatttaaaa taaaatagtt ttaactcaat cccattttct gtgatatagt tagccatact 420
 ggттаatttc tcaaatacagg ttgactgntt tttctcaaat tgnatgagtc cctttgaaaa 480
 ttttggggnc acttttgga ggggggtgcan aaagggcaaa aaggcctcgg ggccttgggc 540
 n 541

<210> 5847

<211> 551

<212> DNA

<213> Homo sapiens

<400> 5847

aagacggagc ctcgctcttt tgcccaggcg ggagtacagt ggcgcgatct cggctcactg 60
 caagctccgc ctcccgggtt caggccattc ccctgcctca gcctccctag tagctgggac 120
 tacaggtgcc cgccaccgca cccggctaata tttttgtatt ttttagtagag acagggtttc 180
 accgtgttag ccaggatggg ctcgatctcc tgacctcgtg atctgcccgc ctcggcctcc 240
 caaagtgtg ggattacagg cgtgagccac cgcgcccggc ctttttggnt ttttttttg 300
 agacagagtt tcattctcat tgtccaggct ggaagtgcaa tgggtgcaatc tcagctcacc 360
 acaatctcca cctcccagggt ttcaagtgat cctcttgctt cagcctcccg agtagctggg 420
 attactnggc atgcaacacc acgcccagnt gatttttggg tttttaggta gaaaacnggg 480
 gttctctata ttgggcaact gggcttaaat ctcctgacct naggggaact gcctggcttt 540
 ggccttccaa a 551

<210> 5848

<211> 535

<212> DNA

<213> Homo sapiens

<400> 5848

ccctcagtct tttagactct cagctgcaca acttgattgc cttacaaatg acctgcttca 60
 aggatgtgga aattcctaata ttcttctggg aaccttctgn gacaccttca ccaggaacat 120
 caacatgtat ttccctgctg ccgtatttgg ttttcttccc atctcgggga cccttttctc 180
 ttactgtaaa attgtttcct ccattctgag ggtttcatca tcagggtgga agtataaacc 240
 ttcaccacct gngggtctca cctgtcagtt gtttgctgat tttatggaac aggcgttggg 300
 gggtagctcg gttcagatgt gtcactctcc ccgagaaagc gtgcagtggc ctcagtgatg 360
 tacacgggtg tcacccccat gctgaacccc ttcactctaca gcctgagaaa cagggatatg 420
 aaaagtgtcc tgcggcggcc gnacagcanc gcaagctaata ctcaaaaact tcttaacngg 480
 tccattccnt ttggaggatg ggttaaaaaa ggccncaggg gcaaatagaa tggtt 535

<210> 5849

<211> 130

<212> DNA

<213> Homo sapiens

<400> 5849

```
ccagacttca atcaacattt taattaccaa gtctatatatt agcaagacaa tgtgggagag 60
ataaagagga aggaaggggt aggtggggag gggcnnnnaa cggngctgnc ccnttttctg 120
cattggctgc 130
```

<210> 5850

<211> 547

<212> DNA

<213> Homo sapiens

<400> 5850

```
actgtttgta gaaaaggggt ctcattctct tttccaggct agtattctgc tttttaacat 60
gaaaagaagg aatgaagttg tgcagcctgc tttgtgtaat gaataaactt ccttgatgca 120
atagagctca ggaagttcct acagggtcaaa tcctttctct tccctttgcc tatgtatattt 180
atgtatatttc attatttctc caatagaatt actactgttt tttctttgga agaaaaatta 240
gaaatgataa taatgggaga catgcactga ggcagtgaag caaaattttt tctaacttga 300
acttatctag aaagtaagtt ttgctcacta gttacaagg tatttttatg ccaaattgggc 360
agctcagaaa atggaaaact ctggaggga ggaacttcag agcccaaagt aaagtcattg 420
actctagcat actaaatggg ggatgttatg ttgnaagcc tttttcagct aacacaccat 480
taatcatgng gaagcttcgg gactgggatg gntggcttct ggctggatca tagtcaaaaa 540
nccgant 547
```

<210> 5851

<211> 543

<212> DNA

<213> Homo sapiens

<400> 5851

```

gagtcttacc ctgtcactca ggctggagca tagcaactct gtcattgcttc actgcagcct 60
caaactcctg ggctcagaca gtcttccac ctcaggctcc tcagtaccta ggactacaga 120
tgtatatcac tatgcctagc taatttttga tttttttag agatagggtc tccctatgtt 180
gagtaggctg gtcttgagct cttggcctca agcaatcctc ccaccttggc ttcccaaagc 240
attggaatta caggaatgaa tgagtctctg tacctggctt cttcatgtat ttttaagatc 300
tgataataag tgcttacact tttagcactg tcttggtgaa ttttatcatt atataatgtc 360
cctaattatc cttggcaatt ttggttgctc taactctact ttgatgaata taaaaatggc 420
ttttaattt attttttga gacaagagcc tactctggtg cccagggttg aaaagcantg 480
gtggganctt ggcttaatgg cttncaggt caagccaatt ntccggcctn nncctcgggg 540
gaa 543

```

<210> 5852

<211> 545

<212> DNA

<213> Homo sapiens

<400> 5852

```

aagggtgaca ccccatattat tggagaagac cccagcaccc gccccctgag gtcttaaggg 60
ctttggtgta tccttggtca cgagcgttg gccaggaagc agagttcctg agagccaagt 120
ctagtgggtg agagaggacc ctggctgggc ctggggagca ggaagccatc tgtccagctg 180
ggcagcccc atgggtccct ggtgcagccc cggccatgtg tccagcgcct catactccat 240
gaggggggtc tgcaccccat cacacgttg ttctgcaggt ctgcaccct gtgaggctgc 300
ccctgggggg catgggttct gttgggtctt tgctcccagc atggatgacc cagcgatagc 360
agtcaagtga tgcgcttggt gggtgcatgg gggccacagc gggtgcaagt acacgatgcc 420
cagtgaagc aggaccacca aaaagacaca cgttggcacc caggaagtgc accagcaagc 480
accgggtcat tcctttgggc tgtgtctcgg naagaacaag ctttcccagg ggtttttggg 540
gcttg 545

```

<210> 5853

<211> 542

<212> DNA

<213> Homo sapiens

<400> 5853

```

acaaaaacaa ataaggattt ttatttgcag tactttccac tcttccttta aaaacttgcc 60
atttgcttat cagttcctct ggggctgacc cactcaaaca agacaaagga taaagaacaa 120
aagatagtcc tccgaggtta caggcttgga agggcagaga ggagctacga accttggaag 180
aaaaacaagg tgctcaggaa tttatgcct aacatttcac ttccccaccc accccttagt 240
gctcccactt tggcagtgat ctctctttgg ctttaaagag aaagggggaa atgtgccttg 300
ttttgcaggt gtgcaacaac acagctctgg catctcaagc agcagggggag aactctaaga 360
cagaagaatt tcttcatgaa aatcacgggt atgttatcac atactgtctc catggcccat 420
acaaggactc ctttaagggtc tttctaacat accaacatat cccccaccaa ctcagnagag 480
aggtttcctt cacttggaat agaaaacctt tggctcatta ttacaggctt aaaaancccc 540
cc 542

```

<210> 5854

<211> 539

<212> DNA

<213> Homo sapiens

<400> 5854

```

ccatctgcac tcttttattt gttgcaatac tgtttataac agctaagatt tggaaacacc 60
ctaagngttc atcaacagat gaatgaagaa aatgtggttc acatacaaaa tggagtactc 120
ttcagccata aaagagaatg agatcctgtc acttgcgaca gcatggatgg aactggaggt 180
cactatgtta agtgaaatag gccaggcata gaaagacaaa cattgccatg ttctcattta 240
tttgnnggat ctaaaaatca aaacaacgga actcatggat atagagtaga aggatggtta 300

```

gtaaaggctg aaaaaagtag tagacagctg agataatggt ggggcagagg tggggatagg 360
 ttaatgggtc aaaaaaagta gaaagaatga gtaaaactta ctatatgata gcccaatagg 420
 ggggctatag tcaataaaaa cttaactgca tattttaaaa tcngaggggn atcagggttg 480
 gtttgaacc ccanggata atgttgaggg gatgggtacc ccatttttca tggnggggc 539

<210> 5855

<211> 548

<212> DNA

<213> Homo sapiens

<400> 5855

gagacagtct cattctgtca ccaggtctgg aatgcagtgg cattatcttg gcttggcaac 60
 ctgcaacctc ctctcccag gttcaagtga tcctcctgcc tcagcctccc aagtagctgg 120
 gattacaagc gtgcaccacc acgaccagct aatttttgta tttttagtan agacatgttg 180
 gccagcctgg nctcgaactc ctgacctcaa gtgatctgcc cgncttggcc tcccaaagng 240
 ctgggattat aggtgtaagc cactgcacct ggcctgagac atccagattt cttctgatct 300
 aaataacctt aaagtgttaa caagnacaac taagtaggct tgggacagaa aaatgaagtt 360
 agccaattgn acttaaaatg tgacaattca nagaatcaca gggctacctg nttcacacta 420
 gtttctatct gctagccaag gtgcacatta ngggtaaaaa ggataacaac ttcttagcan 480
 taagtggaac aataataaan ggnatttcaa tcccattacc aaaaatgnng atttggttca 540
 aaaaattc 548

<210> 5856

<211> 428

<212> DNA

<213> Homo sapiens

<400> 5856

ggtaaagatg gggctctgct atgttgctca ggctggcttc aaaccctgg cctcaggcaa 60

tcctcctgcc tcagcctccc caagtgcctgg gattacaggt gtgagccacc acactcagcc 120
 gggcccgtct ggggttaaagg tacttgcttt tttttttttt tttttttttt ttttcgngan 180
 atggagtctc attctggggc ccaggctgga gtgcagnggc gngatcttgg ctcacggcaa 240
 cctccgcctc ctgggttcaa gcaattntcc tgcctaance tcntgagtag ctggnattac 300
 aggcacctgc caccacgccc ggntaat ttt tngtattttt agtagagatg gggtttcacc 360
 atgttggcca ggctggntc gaactcctga cgtcaagnga tccaccacc ttantntncc 420
 aaagngca 428

<210> 5857

<211> 321

<212> DNA

<213> Homo sapiens

<400> 5857

ccatcaaang taatttattt aaatancaat tcaatngcat gttaagtaan ccagttgtag 60
 caatataaat ttganaaaa tctggcaaat taancctgta tctaaangca gcatattctg 120
 ggatnctacg gaatgaaaaa taaaangngt tgactttcaa gtcaggatga ttnatttgc 180
 cttaaaaata taatttctaa natgacatct gttttcaaaa acatcctaan ggtaaaan 240
 ggctacagga attgttgnca tcatgttgaa attttanatt ttatattanc attagcttaa 300
 aaatcataga cantancatt a 321

<210> 5858

<211> 477

<212> DNA

<213> Homo sapiens

<400> 5858

gagacagagt ttgtctcttg ttatccaggc taaagtgcaa tggcacaatc tcagctcact 60
 gtaatctctg ctcccggt tcaagcgatt atcctgcctc agcctccgag tgaggnggga 120

ttacaggcgt gtgccaccac acccagctaa ttttatgttt ttagnanaaa cggggtttca 180
 cagtgttggt cactctggtc ttgaactcct gacctcaagt aatccacctg cctcggcctc 240
 ccagagtgct gggattatag cgcaagtcac tgcaccaggc caaaattagn ttttatgcat 300
 gcctaaagat gtttatgctg tagacttttt tttttttttt tgacaaagng ttngctctgt 360
 tgcccaggct ggagtgcacn ggtgtgatct cagcttactg caacctcaag cttccccngt 420
 agctgggatt acaggngcgc acnancacaa ccgggttaac tttttggatt ttannca 477

<210> 5859

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5859

catgttggat aaggcaggct ctatgaagta tttttttaat aggtcttcat aagacattac 60
 aagctattga attcccatca agaaaaccta tttctattta attgtgctaa gtgctaaggt 120
 tttactcttt aggttttcca ttttttttcc acttgtgcat tgttcctatg caggccctc 180
 tggatatgtg ttgtgaagtc atatttgtcc gtgcaaagat gctggcatat gctgcactgg 240
 aaaggtccac tgtcaccatg gcaactcata tgcaaagcat acatcacttc atccagaaag 300
 acaatgccac agtgcacaca ttttgttgaa agttcatctt gagtacttct atcaactttc 360
 tctgntttta ctacattcaa gggaccttca ttttttacat ttggtggngc cttcgttttc 420
 tccttggang cccgttgcaa gttggccagg tctggaatgc ttggatcgcc aaatctaaan 480
 gaatgcattg gctgaacca ccagctgaaa aatgaggang cnaattggaa ggtgggataa 540
 ggcccatagt ttngcaagga tttggaaggc ca 572

<210> 5860

<211> 535

<212> DNA

<213> Homo sapiens

<400> 5860

```

gagacagaga cttgctctgt tgcctaggct ggagtacagn ggcgcgatct tgactgattg    60
cagcctccgc ctcccgggtt caagcgattc ttgngcctca gccgccccag tagctgggat    120
tacaggngca catcaccata cctggctcat ttttgattt ttagtanana cgggggtttca    180
tcatgtttggc caggctggtc tggaactcct gacctcaagt gatccgcca tntcggcctc    240
ccaaagngct gggattacag gcgtgagcca ctgcacctgg cccaaattaa ctacttctac    300
tttgatgaat gtcttccac taaatatcat tttattatac ctagtaatat tagccaaata    360
acagtgttta atacaactaa tttatcagaa caaattacaa ctattcataa taaaccctac    420
atatnaaaat gatTTTTTaaa agctcaatat taacnccaat tgaaagaaac ctaanactgc    480
anaatttggc cactntttca atttcctttc cnggttgggt tatggacccc aaatt        535

```

<210> 5861

<211> 478

<212> DNA

<213> Homo sapiens

<400> 5861

```

ggtatTTTTa gtagagatga ggtttcaccg tgtagccag gatggctctcg atctcttgac    60
ctcgtgatct gcccgtctcg gcctcccaaa gtgctgggac tacaggcgtg agccaccgca    120
cccggccaag actaaagtag gctttaaacc cgtaacaggt atgtgctcca agtccttctt    180
tcctgacttt tcggaaaaaa atttaaattgc ctattacat agtggcattt aaaaactaaa    240
atgggccagg tgtggtagct cacagctata atcctggcta ctcaggaggg tgaggtagga    300
gcattgcttg aggcaggaaa ttcaagacca gtctgggcaa cacagtaaga tcccacctcc    360
cctgaaaaaa tttaaaaata aatcagctgg gcctgggtggc atgtgtctac agtcccagct    420
acttgggagg ctaaggtagg angattactt gagncttaa agtttnangc ttgnanng        478

```

<210> 5862

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5862

```

gagacagggt ctcatcctgt tgcccaggct ggagttcagt ggcgcgatat agctcactgt 60
aaccacaaac acctgggctc aaacactcct cccaccttag tctcctgagt acctggagct 120
acaagcatgt accaccatgc ctggctaaat ttttcactct tatttttgaa gaggcggggt 180
ctagctatgt tgcttgggct ggtcttaaac tcctggccac atgtgaccc ctcacctcag 240
cctcccaaag cactggaatt acaggctgag ccaccgcgcc tggctaataca tgttttttaa 300
aagccttcca ggttgaagtt aaaggcaaaa aaaatttcta gatgaataag agcccattac 360
taagcatcag ctatgcacaa agcatcctaa gagacaaaaa aaaaaaatga agtgacagtc 420
cctggagaat tcataattgg agatgggaag acagatggtc ctaaaaatac cgaggagttg 480
agaagttaac agctttaaag nctcanatga cttgcctggc aggcacttta ntggggccca 540
aggttccttc ntaaacctgn n 561

```

<210> 5863

<211> 568

<212> DNA

<213> Homo sapiens

<400> 5863

```

ggccatgtaa atgtcttctt tagagaagtg tccattcata tcctttgcct atgttttgat 60
aaggttgttt ttttttttct tgtaaataatg tttaagttcc ttttaaattc tggatattag 120
acctttgtca gatgggtaga ttgcaaaaat tttcttcac tctgtaggtt gcctgttcac 180
tctgatgatt atttcttttg ctgtgaagaa gctctttaat ttaattaaat cccacttgtc 240
aattttggct tttgttgcaa ttgcttttgg tgttttcatc atgaagtctt tgcccatccc 300
tatgtcctga atggtattgc ctaggttttc ttccaggatt tttatggttt tcagttttac 360
atttaagtct ttaatccatc ttgagttaat tttcatataa ggtgtaagga aggggtccag 420
tttcagnttt ctgcatatgg ctagccaagt tttcccagca ccatttactg gaataggaga 480
acctttccca tttcttggtt ttggcanggt tggccaaaga tcaaattgggt gnaaaccatg 540

```

gtggnnttaat tctgagggcc cggctcng

568

<210> 5864

<211> 566

<212> DNA

<213> Homo sapiens

<400> 5864

atgggggtttt tttttggagt tatttcctca gtggagcaca aattgcccc acagtctgat 60
ccaattaaat taaggaccat ttgaattttt gaggctagtc tgtgatatct gttatgactc 120
caggagggca cgttttacct gcattgtcct ctggctctcc cttgtaaact aactggccta 180
tggttttagct tgctgttctc attaagggtgc aagcctcctc ttaattaaga aacaccctgg 240
cttctaggcc acacctccat ggaatttagg ctctgcaaca catagctagc tagtagcaat 300
aagaaatgct gatggcctgt gcctcccaag gagataccat gttcctcaac tgggagctgg 360
agagagagga atccctgtgt tcttgaatga acttcaggta gaaggtgaat ttttatcaca 420
ctgaactgga agggggaagg aggggaagctg tggntcaaata gtcacccgat tcttactctt 480
cttaccaagg tttaatagat ttcttgaata aatggtcctt catttggcta aggccctang 540
ccattttcca aaggttttaa aatagg 566

<210> 5865

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5865

acccaaagtg tcctttattc tttatcatcc tatttgagtt ttattgtttt tacacagctg 60
ggaaatgctt aaggtacaaa ttaataaatt ttaaactcag tatggaaaat acatttaata 120
aattaaagca aaaaccaaag aagatctgag gagatccaag agatcaagac aatctgtaac 180
cagagtctga agtatccaag gagctactct ttttgaggca tattctcctc agcttcagtt 240

tatcatttga taaacacatc agcaaaaggt tcagtgtttt aaacaaatgt agactttatt 300
 ttgtactgta caaagtgcta atgtcagtag atccattaaa atatagaata ttaagaaag 360
 atcattaata aaagtaatgg tcattcaatt taatggtaca gtttacagcg gtttactgct 420
 agtggtttta gtcagcatga gcagtatcaa aggacttatg tagctagggt ctaaacttta 480
 cagaaaaccc agtccattcc agggctatag ccatataagc ntattcatat tnnaatagtt 540
 tccatatgta caggaan 557

<210> 5866

<211> 414

<212> DNA

<213> Homo sapiens

<400> 5866

caaattgcat ttacagnaa aaatgcagac cactttggat agctatggct cgatacttct 60
 ggggtgccctc ctcctaagac atcctcttct tacattccac tgaacagaaa accatccctt 120
 ctactggcat gaacttctgc ccaaggaggc atttgctgca gcaagagcac agaaggcact 180
 gtgtggatgc atgccagctg aaattgttat aggtcacgcg ctgcacttct gggtcgatgg 240
 cattgtggca tccttgacac accacagcgt gattcttcac atagcagggc ttgcacacgg 300
 gcttgnccatt gaccatcacg tatatctccc cagctagaag gctatcacag tcaaagcagc 360
 agaagtgttt naggtgccaa ttctgntttt cngcctgggn naccctcatn gcng 414

<210> 5867

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5867

gagatgaagt ctgcctctgt tggagtgcaa tggcgtgac tcagctcact gcaacctccg 60
 cctcccgggt tcaagcaatt ctcttgccct agcctcctga gtagctggga ttacaggcat 120

gtgccaccac gcccggttaa tttttgtatt tttagtagag atagggtttc tccatgttgg 180
 taagactggt ctcaaactcc tgacctcgtt atctgcctgc cttggcctcc caaagtgtg 240
 ggattacagg cgtgagccac cgtgctgagc ctatcttttg ctctttaaaa ttttattctc 300
 ctgtgaccca ctggtacagg atacagtaac gtataacaca gcaagagaca tctaaccac 360
 tcaagaatca tgagattttc ctgacagtat ttatacaaga ggcctaaatt gaaaatgtca 420
 ttaattttaa aagaacatgt tagccaggca agtggctcat gcctgtaatc tcaacangca 480
 tgggaaggccn aagccggaag gacccaaang gcaggaaatc gagaaccttc tggctnacat 540
 aagggaacc atntttctta aaaaaaaaaa aa 572

<210> 5868

<211> 562

<212> DNA

<213> Homo sapiens

<400> 5868

gagagcacia ctccaaatca tcttttatta atataaaaag ggcatattta gcaaaagaca 60
 cacagataaa agagtcacta tggctcagga cacaaggcag ggaggtgcca ggcctgtgcc 120
 cctgctgggg gagaaggagg ctctgggacaa agtgggagaa gtgctgggaa gggctgagcg 180
 gtaggggcca caaaagtcc ggtgggcaac actgtcggca ggtcatgggt ggagcttaca 240
 aaatttatat aaattctaga agaactaaaa ctaattttct atcagtctac attgtgtgta 300
 aggagggaag agaaaacata ttgataaagt ttgcttcata ctctaaaata gccagtata 360
 tttcaacatg ccaaataagc aactgttgct tcctttttga acccttatag ccaacagtta 420
 gtgttccaag taagagtgga taaagtcccc caaatcaag ttctagtaag aagacatttc 480
 tttcaattaa acttaccccc ttntacagg aaatcanctt aacaaggga tcttggtttt 540
 aactattann tggccattt an 562

<210> 5869

<211> 548

<212> DNA

<213> Homo sapiens

<400> 5869

```

gagacagggt catgcactgt caccttggct ggagtacagt gatacgggtca cggctcactg. 60
cagcctcctg gactcagggtg atctttccac ctcagcctcc caagtagctg ggactacagg 120
tacacaccac aatgcccagt tagtttttat ttatttattt attttgtaga gatgaagtat 180
catcatgttg cccaggctgg tattgaactc ctttgctcaa gcaatcccc tgcctcagcc 240
tcccaaagta ttgagattac aggtatgagc cactacaccc agccccaatg ttatccttta 300
agtataataa gattataaca tttcagaaat caacatgtgt tagtacaata tttataaca 360
ttcaaagatg gaaactaaag taaatttcct acacctacct ttatttaaata taataggaaa 420
atcaatgttg tggcataatc ctttcaaagg tagaaactta tgnntttaac tagctgatcc 480
aagacttgca tttgctttct gatggttaaa gnaactacct ttactttanc aagnccattt 540
antaattt 548

```

<210> 5870

<211> 423

<212> DNA

<213> Homo sapiens

<400> 5870

```

gctgacctgg ctatcttaag tagttagaag ctatattata atagggccac actatggtag 60
cttaaaatta tagaataggg agattaaaaa tatcttacag ngttttattct aaatctgata 120
gtatatttaca aggtgtgtgt gtgtgtgcgt gtgcacgcat gtgtgtgttg gagacagggg 180
cagctgatat tcatggcaac atgtagtatg tgccagtatc ttgaacaatg atatataatg 240
ctaagactca aatggtttcg gtttttaata cttttgtttt aagctcaggg gtacaaatgc 300
aggtttggtta cataggtaaa gttatgtcat gggggttttt gtacaganta tttcatcacc 360
taggcnttaa gcctagtacc tattaggnat tnntcctgat tctnnccctc ttcctaccct 420
cct 423

```

<210> 5871

<211> 566

<212> DNA

<213> Homo sapiens

<400> 5871

```

gaaaaaattt ccaaatgcat caggaatctt acagtaccaa ctcatcattt ttcataacac   60
agatttatgt cttcaattgg agctatttag aaattggccc atagccacct gtaccctaaa  120
ttttctctgg gctacttgga agtatttaga gaaatgtgag atggtagttg atgaaaacag  180
agttcttcat cccaacagta acagctagat aactgactgc ttggccaaac atttgactca  240
atccagggaa tggaagatgc cattcaaagc cagattccag tttgtgttaa ggattatatt  300
tctgtcatca catttccttg acagtcccg ccaactaaaa tccccagca aaagcccagt  360
gattaaattc tcctggagca tatTTTTcca gcttatggaa acaatctgct gcagtgtctc  420
ctgtaatatc caaaggatag ttccatttct gaggtgata tatggaagta gattactcac  480
aacccaatcc atcttcacc aacaatttga ntttgaaatg actatggaaa ggactggggg  540
aatnaaaatc ccatccctgg aanggg                                     566

```

<210> 5872

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5872

```

gagatgtagt ttcgctcggt gccagggctg gaggcaatg gcacaatctt ggctcaccgc   60
aacttccgcc tcctgagttc aaatgattct cctgttgaaa cgggccagcc caggaaactt  120
gtgcaagcag aaggaggatg atagtggcct tcatgattta tctcatgtat tttcacaacc  180
agggaacctt ttaatccggg aatttgccac aggagccctc aaagctgaga tgtaattaca  240
ctaaatatc agcccaagta aaagagtttg cagggtgga aaggaggagg gggnagggtc  300
tgctctgtga ctaggttgaa aacctctgc ttctactcca tagcacagtt aaatgattca  360

```

ttctccaagg catggaatag ttcttgcttt ataaaaatag tactgcgatt aaaaaaaaaag 420
cacttctgcc aaaggaacca tgttccaaca ccggaacaa ggtgttctgc ttaaacagaa 480
taagatcacc anccccatcc atccttncctt cctgggtcccc tccaactttg agttgggcat 540
tccaccatgn cccggggggg agg 563

<210> 5873

<211> 483

<212> DNA

<213> Homo sapiens

<400> 5873

caaataaata tcctttatta aagaaaaaga ggaatattgt taaaagcacc aaaactgtag 60
gttgttacat tgcattgtaca acaagagaaa ggtgattgca atacttggtg tccaagtact 120
taactctgaa gtcattgagt taaaaaacat gaaatacaaa gcaatacaat tacaatgcag 180
aaaagctgca ctaaagagca aaaggcaaca gtcaaaacga ttactggaga tttcatggta 240
ttgctataaa tgcttgctta gtttttcctc tgtactttta atactttagg atgttaattg 300
aacatattta agtattgtaa atttgcaaga gttggcattt acaatacact gtgcacactg 360
tccatttaat gtaatggtag taaagccatc cttacaagcc aagcaaagca caatgtgcta 420
gtgttttgct tctaccttn ataatttgc acaaagctag tnaatggnga nngagttnc 480
nat 483

<210> 5874

<211> 584

<212> DNA

<213> Homo sapiens

<400> 5874

aactcagagt taactagaaa aatccctttt attaaaatac attgtaaata ttgctcatta 60
atttctgta cttgaaacat tttttctgaa cccctaagca ccacttagga tagatgaagc 120

aaacctgatg tgttttattc ttctctatta cctgagtatg aatgtgacat ttaactcctt 180
 gaacttcttg ctctctgaa gacatgaggt gctatcactg gatttctcta agtaagaata 240
 gcagaagtcg ttttaaaaaa atactgcaga tagtttttct ttccaaattt tatgaaaata 300
 ggtataggaa agaaaatctg aatgtccttg gtgtcagtat ccatctgctc catgcatcca 360
 ggcagggtctt ctttccattc ccaaagaggg gggcagtcctg cctaacaggg ccattgctac 420
 ccaactgtgg gagcccagct cttanactga gggaaggtct gaacaattgg nggttcgtgg 480
 tgaaaatata accctatcat aaaacaaaaa tgcngatgag acccancntt cataccttta 540
 taaacccttc taccttaact tacctcggac cntttgnanc tctn 584

<210> 5875

<211> 668

<212> DNA

<213> Homo sapiens

<400> 5875

agagggtattc aaaaaattta ttgaaagcac tgtactagga gctgagaaca cgatgatgag 60
 cacaacacag ttcttccctt tggaaacata gataagtggg gggaatgtca tcacaaatgt 120
 aaaacttcac tatgagatga gtcccgatg aggttttct tagggaaacc tgagaaagag 180
 ttgagactaa aggtatgtgt catatttttc acaaggcaaa actgggggaa tgacatatac 240
 agaggcttgg gctagaaaaa agataccgtt agtccactta cttttgagac agttttggct 300
 gctttccctc ttcagtgcc tgtttttagaa ctgagtcctt actgaggctt gtaagatggc 360
 tattatggga ggtgagagtg ttacaaaatg aggtgaaga ggtaggtaaa gaagccagac 420
 cacttcaggc tccctctggc ttatttaaag caagataaat ccatggtgga aaatcagatt 480
 tgcaagaaaa ggtagttgaa ctaggttgct taattggtgn ctagacaaga gaccagcttg 540
 gactaagtaa aantagtga ataagatcgg ttataggtgg atgacagagc cnacntagac 600
 gtggtaan agggaggggc ctaactggt agngtcagc ttgccactgn tgagcataat 660
 gccctagn 668

<210> 5876

<211> 646

<212> DNA

<213> Homo sapiens

<400> 5876

```

aggaaaacat gttctttaat aaacataaga gatagtcaag tctaaataaa ataataatga 60
taataataac agattctaca ccacagttgt atacacttcc agtgaagctt tatgcattcc 120
attctgagct cctaatacca ggtaaacacg aatcataggt ggaaatatgc catgttttagc 180
actagaagta acatcacagt ttattagcaa aataaagcag aaaatgatca aaatgatcag 240
gtaaataaat attacaacat ataatgtact ggtgatgaag ctgcaataaa gtaatataag 300
tgatgtttac aatttttttt tttttttttt tttttttttt actgggaagg ctagttgtaa 360
acataaacat tctcactgaa ctactggccc cccaaaacct aacctatctc acaatcaata 420
atcatctttt gctataaaat cataaaaact tgnactctgg ggctcttttg nctgggacag 480
cttttctact ttctgacatc tnttgaagtc tttcttctca aacttcaagc tcaggcttta 540
tctcctgcc aaacctttcc tgangcttcc aggttctgtt aaaaccnggt tctttctttt 600
tttttttttg aaacggagnn tcctntgtgn ccagctggng ggcagg 646

```

<210> 5877

<211> 644

<212> DNA

<213> Homo sapiens

<400> 5877

```

agagcctaag ggcctgtatt ttaatgagaa aaaaaaatt tccaacatag ttcgggtagc 60
tttgaatggt ctagtcaaaa aatacttttg gtatataaaa agcctgtacg tacaattcac 120
acctcagtga agcgccctcc ttgccttgag gctgggcctg ggacaaaggt ggcctcacag 180
ccagcccagg caggagatc ggcagagagg ggtggccctt gaccccagct cctctgcccc 240
agctgctgct ccttggtggc ggcccctcct gacaccaggc gtctgccatc cttcaggcac 300
caaacagccc cgtctacctg gccctggtct gccctcacac cagtccaccc ccagcccca 360

```

ccccaaccac cctccgctgc acggcctcca gcacctgact ccattcaggg aactgaattt 420
 gagcttgcag ggggtgagaac cacactgagc agcatgacag gctgtgagat cggaggagaa 480
 gagtatatgc tgaggctntc ccagttgtca cttggcttan gggtcctggt gcccggtggnn 540
 ccgcagtcca gccacagtgc tggcctgaca aatcagcctt aggtgactgg aacaggaagc 600
 ggaaccccaa ggnggccaac aaaacggttc tggaggatac ccct 644

<210> 5878

<211> 613

<212> DNA

<213> Homo sapiens

<400> 5878

ctgaacgaat tggttaattt atttggtaaa taaaacaacc atttctaata tgacactgaa 60
 atggcaaaat gatagtcaca tcacactagg gagaaaattt taataagcag acaaaacaaa 120
 atgataacat tgnccatttt ttcaaagcac tgacatacaa aagtgaaaag atncaacagn 180
 gcacattttc agggtagcta tgtttactga agtctaaaaa ctctccacc tttaaaagtc 240
 agcattattt cttgatggaa gaaaaatata cagtaacttt ttgatgtaat actaatatta 300
 tngggttttc tttgcaaatt cttttagttc aagtattact aaagaaacat aaacatatgg 360
 acattacaaa ttcagctaaa aaactaggta gtgctgacta tcctgtttta tggtaatata 420
 tgtattaggt atttaaattt gattattata ncacaaaata attttaacat ggaattctat 480
 aaagnatgta ttttgtcact ctacagtgcc tgctnttcca tgggtttttt ttaagangtt 540
 catcaattta cccaatttgg ncatanctgt accaccggaa tngggcctnt aacccaaaat 600
 ttncgtaaag gct 613

<210> 5879

<211> 596

<212> DNA

<213> Homo sapiens

<400> 5879

```
aacttttttaa ttcattttca ttttaaattg ctcatgctaa tgaacacagt agtatggctt 60
tacagatttc ctagacacaa tcctcaattt ggctcagact tgaatatacg tcatccaaga 120
gaactttttc gttccttctt aagggtgttta aaaaataaat ggctataaag tatggggaga 180
aaacatttaa gaataaggtc agagcacaca ttcagataca ctttggactc agatgtactc 240
ttagagaact gtagagataa aatgctaatt atagtacatg taaacatctg ttcaaattga 300
taaagagtga acataaaata ataggatgat attattgtaa cagtcgtctc cagacaggaa 360
ctggctcttg tcttgcagtc acaaagctaa attcaggcaa tgatgatctc tctctgctgg 420
aaaaagagaa gactattaaa aaaaactttg aaaatagcaa ataatctaa acttgaatca 480
catcataaat ggcctccact tttctaacca ttaaaaangc tattggagaa agaatcaaaa 540
tcaaagtgca ggaaantacc caangntttg gctaaaanga tttaccaaac ctnttn 596
```

<210> 5880

<211> 653

<212> DNA

<213> Homo sapiens

<400> 5880

```
attggagcag gtttgaagag aagcatggac agtattaatg acaaggccac taaagacctc 60
tgaccaccac taagttcagt taggttttct ttccaggtat ttcccaaggc aaccttgaac 120
tccagaccat ccaaaacagt ttgacctctt ggtgggtgcaa gcatagcatt agcaccaggc 180
aaaagagtag aaaaaataga cccaaagtcc ttgttcacct ttgccatgc aatatttagg 240
gcttggtttt tcttctggtc aaggctcttct atagttgtaa gaattttgga tttgtcattt 300
tctacaattc tcttcttctt catcaagtca ttgtatcgct cttcagcttc tgtcaataca 360
ttcatagctc tcatattgac atttcttcct agtttctcct tcatttcttg caacttctga 420
agtctctgac cagcttcttt aagggttgta gttttgaaat cataggcact aattgggttg 480
cccaaagagg gtctctctgc atcaaatacca gtcataatct tttcaacatt tnggatcctt 540
gcagcaccat cttaagcct cccgttanng ttgcctnatg tggggccnaa ttccttattt 600
taaccggaaa centgggttg gccctgggtt ttgcccttng gaaataagtt taa 653
```

<210> 5881

<211> 645

<212> DNA

<213> Homo sapiens

<400> 5881

```

aatagacatg gtctcaatac gttgcccagg ctggtctcta actcctagct tcaatcaatc   60
ctcctgactt gtcttccta agtgctggga ttacagggtg gagccactgt gcctgggtctc  120
acttttccaa ttctaaagaa tgtgttgtgt aagccttccc ctcaacaact tagtgaaagg  180
tgaaaaaaag gtttggaat aaaagcatct gatgtttgaa aaagtacttt gtgaagtaaa  240
tgcactaaga gttatctgtg tattactgca aacagggtgaa catagtaaaa acaaatgaac  300
ttactgcaag tagctcaaca tagtaaaaac aatagaaatg tttggcttta cccatcagcc  360
aaataaaaaa atctccttgt aaggttaaaa ggatcgaaat gtaggaagac cgtgaatatt  420
caccaaaacc cttcatcttt tcaatttctt catctgtttc tgggctgctc attttgatg  480
ctttaacttg gttactacta ccagtatctg ctttaanata gtttggcttg ggtatctaac  540
aacccgagac tcttgaattg gcatctgcat ctaagtctaa nggtttatgc ttaatgattt  600
gnggggacta actggactac ttcangaatn cagnggtct accat                      645

```

<210> 5882

<211> 540

<212> DNA

<213> Homo sapiens

<400> 5882

```

aagtattgaa tagagagaat cactcactac ccaataaatc ccagggtggg taagatattt   60
cccattttca gatgagggtg ctaagggtca gaaggatgga ggcccagccc aatgctactg  120
acacagctag gattcagtat tgggtagaga atctctatcc agtacttaag ggttgtcaaa  180
aaaaacagca tatgaaaaag aatgcctgct ggagaaggaa gacaacacaa cagaaagcag  240

```

agatgggaga gagttcaatt cttgaactcc tggcctgaag tgatccctccc acctcagcct 300
 gagagttgaa ttctgatgac attgtttgaa cccctagatc cagctttacc tgaagctaaa 360
 tgcgctacta aacttctcag tttaaaaagc ctataaatcc tgctgnttga gtcaatttct 420
 tatttgcaac tatgntctat tcaattcaaa gccttagggc tnancccagt taaactgctt 480
 ctacanttct ggtggatctt tngactnatg aaacctaate tttcgnttta ccacngtcca 540

<210> 5883

<211> 479

<212> DNA

<213> Homo sapiens

<400> 5883

gctgtgaaaa tactctgttt attaaagacc aggcgaggagg aggttaagggt gtgggttctg 60
 tatgggaaac tgagtcccag cccaggggaa ggagaaggag gacggaccag ctggcagccc 120
 gcgagaggtc acaggtcagt ggccggaccc cagtcatagc cgtcttcate ggaggactcc 180
 gcatcatgga ctgcgtaaa ctttttcttc agggcttccc gttcataggt tcgcatgctg 240
 tcctgtcgcc actgtccctg ggggtggcgg ctgtccacct gggccccctg atgagccgag 300
 attctccac gatccctcgg gctctgggac tcatctgcct gcacgggctc cgaggaccgg 360
 ccagggtggtg acccgggggc tcatcatcan atccgtgtag ggccccctt gccgtgtgt 420
 acccttgca tccgtgtacc cncgccttg ccgccgntt gnaannccctt gtaaccccg 479

<210> 5884

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5884

actaaaacag aaagactttc aggaaaatgt catttaatga tttcagctat acattacata 60
 tacaactctg tagcctagca acaatcattg ctacaccatc attaacttta aatattttgc 120

ttggtgagct attctcaaat gtagcacatt ttaagatttt gccatcatta tgactgtgga 180
 atcattgttt ggttttcata ggaaacagat ctgtcacagt atgaagcttt gtttatttta 240
 agaaactggg acacaattac atttccactt acaagagaac gccacagata taactaaagg 300
 caggcttcga tggctccnca aaggttgcgt gcgggaccaa cccacacact cctngnttcc 360
 ccgtcgaacc gccntgncca ggttnacatg gtttcatttc cagagatgct ttgnttttcg 420
 naagttagg 429

<210> 5885

<211> 632

<212> DNA

<213> Homo sapiens

<400> 5885

caaccaccaa agctgtaact tttatttgcc aatagatatt ttaataaaca ggcttactcc 60
 atctgtaaga ccctgataat gcctcttagg aaatcataga aaaataaaat acaataatta 120
 gtaatttgta ccttgtaaca aaatcttatt atgttgctca gcaggtagtt tgctaaacag 180
 catattcttt cagcaaatag atgacatatg ttatgcaatt caccacaaac aaccctcat 240
 attgagagct gagcattcta taacactatt aacttgtaag catgccagca catgaaaatt 300
 tacatggaaa gttattaata ttatagtaga tttttgtaag ataaaaatag taccaccttc 360
 aaataagtct ggactacttc actgctatag taaagtagat aataggtagg attgcagttc 420
 aattgttaac acctttttac cttgtttata gctctacat attgngatta taaccagaaa 480
 agagaatgta ngctgtgtca ggaacctgag tggaaggcat atattgaagc tttaaatggg 540
 gacagaatac taangagaaa accttaaaca gngctatact tcctatctca tagataaatc 600
 ttttnccctt tagnaagacca atgggncaga gt 632

<210> 5886

<211> 494

<212> DNA

<213> Homo sapiens

<400> 5886

```
gagatggagt tttactctta tagttcaagt ctggagtgtg atggcagtga tctcaactca 60
ctgcaatctc cgcctcccgg gttcaagcga ttctcctgcc tcagcctccc aagttgaatt 120
acaggagccc accgacacgc cggctaattt tttgnatttt taatagagac tgggtgacag 180
agcaagatcc tgtctcaaga aaatgataat caattcaatt caattcaatg cagtccccag 240
atcacgggct ctgtgctcag caaacttcat cacaacggga ctgatgtgga tcagagtgat 300
gaccacttca cggatgagac acttcaactcc cgcctgcct cccagatgct aaggagggat 360
aatccaagtc tcagccttcg acagtccttc cttccagacg gcnnnggntg gtttttctct 420
aagtgccttg ccattcaaga gcnaccaacc ccaccantg gcntggacta agagggaaat 480
tanttttttg gaac 494
```

<210> 5887

<211> 448

<212> DNA

<213> Homo sapiens

<400> 5887

```
atcttgatat tgnttattgn ttacggttat gacacattat atatatacac acacacacat 60
atgtatatag ttacgtacac acacaccaat ggcactgatt ttggtacaca tcagaattac 120
ttaagagagt ttgttaaaaa tggagattct ggagccccac tctgtgagtc tggacgatag 180
gtcctacatt tttaaagtcc cctgcctgcc cccaaggtgt ttttatacag atggtagact 240
cactctgaaa aacactagaa catacattct taaaatatca aacattgaat tctgggtatg 300
atcattcttt ttggtcagg gacaagaaaa aaactgtcaa agacaactga gatthttgagt 360
ccaggtagcc cggaggaggg aaaagtaata cttacaaaaa taaggntctg aatgaaaaag 420
ggagaagnnn ggataccnan nggttttt 448
```

<210> 5888

<211> 540

<212> DNA

<213> Homo sapiens

<400> 5888

```

aggataatta aaactacttt gaatttttta tttatcaatc tggtttctaa tataatttta 60
gttaaataaa agacattcac aaagaatatt aggcatatgt acataatttc cttctttcat 120
tctagtttac atgctgttgc ttttagagag tgaaattttg tgttatttca caggggatgg 180
aatcctgttt gactttacag aaagaatatt tagcccagct tttcacagca ctaacctctg 240
cagtcaccac gtcactgaa aaaattttaa aaacctgaca aaataaaaact tagtaaaatc 300
tagaaacttg aattcaattt aataattgct gccctttttt tgggaaaatt gctcaacagg 360
gtggtgaaaa gaaaaaatgg ggggtttcaa attcagtgtt gnttggaggc atgagacata 420
aacggccatt aaaacgttta ctgcgtaaga acnaggata atggggngag gaaaaggaga 480
aagaaaaaag gtngattgaa aagaacngat ttcttccttg aanggaagna aagctttttg 540

```

<210> 5889

<211> 570

<212> DNA

<213> Homo sapiens

<400> 5889

```

cataaaggaa aacaaaaaac aaaaaaaca aaacaaaaca aaaaaaactt aaggtatgtt 60
tcctgcaagc aaaatggagg aaaaggtatt attgttgta ctatgattat taagccacag 120
acacataaaa tccacaaaat ggattggtgg ctttggaat gcaataccgt atcaaagggtg 180
cagactgttt caaatgttct ctacatattg ggctgaaaca agaaccacaa caaacttcaa 240
ccccatcagc gacgcaatgc tcctgtgacc ttggtgaaaa catcgtcgtg accagctaga 300
tccaggaatc cttctctaga gacacgtgga aacgtcccat caggtagggt ctcaagtcca 360
aggtgggggt gaagggtctt ggcttgtccc agggcaaagc acgtgcatta ttggaccaat 420
ttctgaatag aattttatta atatgtcnaa tcaattccag gcacttgaaa tggctttggc 480
tggaataacc caacatngca agaatatgga ttcacagagc attcagccca agctgggttc 540

```


ancangcaag ggntatnggt ccttnangct

570

<210> 5890

<211> 485

<212> DNA

<213> Homo sapiens

<400> 5890

```

cttctcetta gaggggggtt tgccctcctt accttctca ctgctctcct tgggtccggc 60
ctcctccagc cccagcccga agaggtcga gtcattcttc agtctgaagg cggggagagg 120
gagcttgggg ggtgggggcg gctcggcagg gccctcatcc tcgtcagtca catcggaggg 180
gtcatctcgc acgggaaagt catccgccct gcgctgtgtg tctgatccct cgccctcaaa 240
gtcgggggtca tccatgacga aggacagcat ttgtgcagca atgggtccct cggggtcact 300
ctccgacgag gaggcctgnt acccttcccc ggntccatct naggaggggg cctggtgctg 360
ctgcgctttt ccggacctgt gcgaacagag acaccgcctg gccagggggg tcctgcggcc 420
ctcgnggaag ctgccccctc cgnggtttta aactggtntg gaggaccact tggctntggn 480
tntna 485

```

<210> 5891

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5891

```

gagacagaga ctgccccagt tgcctagact agagtgcagt ggtgcaatca cagctcagt 60
caccctcgac ctctgggct caggatgatcc tcccacctct gcctcccaag tagctgggac 120
tacaggcatg caccacgacg cccagctagt ttttgtattt ttagtagaaa caggattttg 180
tcatgttgcc cagtctggtt tccaactact gagctcaagc catacgccct cctcagccct 240
ctaaagtgct ggggttacag gtgtgagcca ccacaccag ctcattttta tctgtttaag 300

```

gattaaaata ctcccaactt caggtatgtt ataaatgaag aagtcattt ttcttctatc 360
 ccacataact ccctcaaaaa aaggaaagta aaatgaggaa aaagatataa gtanaaaaga 420
 aaaatgggct ttaaggggaa tacataggga gccatttata tagctctggt tgacaataag 480
 gtggggagaa atncctagaa gctaattnta ggggaaaaga tgnaaatggg ggnnatggcc 540
 actggnntgg gttggctctg ggttccacca aa 572

<210> 5892

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5892

cttttttttt tgagatgaag tctcgctctt gttgccagg ctggagtga gtggtgcgaa 60
 cttggctcac tgcaacctcc gcctcccggg ttcaagcgat tctcctgcct cagccttcca 120
 agtagctggg attacaggcg cacaccacca cgcccagcta atttctgtat ttttagtaga 180
 gacagggttt caccatgttg gccaggctgg tctcgaactc ctgatctccg gagatctgcc 240
 cgctcggcc tcccaaagtg ctgggattac aggcgtgagc caccacgctt ggctggggca 300
 gcttttcttt aatacacaaa ctgaggaaat gaccctgcaa atttcagggc ttagaaagcc 360
 ttcatacgga atcacagatg aaatgcttct tgggaaattc acatgacaca gngccacgtc 420
 atacctgctc tgcagggcct catgggggtg atgtacacac agcgccccctc cgagctctgc 480
 agcagcattc caggatggca aactntgcca aatagttttc cgttgccggg gggcccaaaa 540
 aacacnttgg nncnctgggg atacagggtg aacctggnn 579

<210> 5893

<211> 595

<212> DNA

<213> Homo sapiens

<400> 5893

aagtatgaaa ataccatggc tttatttttc tcttaaaaag atagccgtgc ttatgagcta 60
aatggaaagg atgtatgtca ttctcatcag taaacaagat ttaactgctt tcagatgcaa 120
accataatgc cgaagaagtg acatgaaggg gataaaagtc taatgctttc atcttcacag 180
caatcaaatg caaagtaaag caaaaatgaa atggacttaa ttaatgctgg gcattcccac 240
agggaaaacg caagaggata ttataacaat cagtagcagt attgtataca atttaaaaat 300
tccattaggt tgagccaccc tcactcctct ctctggctct ctcccatctg aggtatagca 360
ggctggaact aacagaagct agtaagtcng gagccttttg cntttggagt ccactgagat 420
aagtgagtgg gcaaagtctt ggaagaccag ataatctggc tctggtgagg cacctacgtg 480
cacantgtcc cattatggaa gttgacaaca tactcagcat tagtcctntg cccagaaatn 540
ncgaaaggct caaaagggtg aaaggtgaag gcnccaaggg gnnncnctgg gggtt 595

<210> 5894

<211> 542

<212> DNA

<213> Homo sapiens

<400> 5894

aaaatgacgg aaatttattc tctcacagtt ctggaagcca gaagtcagac atcagcatca 60
ctgggtcaaa ctcaaggtgt cagcaacact gagctttctc aggaggctat agggtagact 120
ctgtgtcttg cctcttctgc tttctgctga ctgctggcat tccttggctt gtggccatgc 180
cacttttagtt ttcaaggcca gcattctcag ttgtttctct gctccgtcgt catatgacct 240
ctgatatggt ttgggtccgt gtccccaccc aaatctcatc tcaaattgta atccccataa 300
tccccacctg tcaaggaggagg gatgaggtgg aaggtgattg gatcatgggg gcggtgtccc 360
tcatgctgtt ttcatgatag tgagtgagtt ctcaaacgct ctgatggttt tataaggcaa 420
gtttttctctc tctctctctc tctctctctc tctctctctc tctctcgcct gctgccatgt 480
aaagacatgc ctgcttnccc ttctgncatg aatggnangt tcatgangct ttccanncca 540
tg 542

<210> 5895

<211> 481

<212> DNA

<213> Homo sapiens

<400> 5895

```
gtggaaacaa ggatcttgcc caggctgttc tcaaactcct ggccctcaagt gatcctcctg   60
cctcagcttc cttagaacc aacattcttt agggattggg ggcaaagttt ttttaaagga  120
atataatgtc caagttatth tgnataata gtctgatctg tatttccagn cttccatcta  180
gtattttata ttaagatcat gccccacac acatctactg tatgtttcct taagttctag  240
attcaggaaa actaaattac aaaaaaatca aaatagtgtc ctgactctgg agggaagggc  300
agagttgact ggcaacaagg gaactttgag gtaagagtaa tgttgtatac cttgatcaga  360
gagtgggaatt gtctgtgtat acacttaaaa tgnatggggt tgcccggcgt ggtggctcac  420
gcctgnaanc ccagcacttt gggaggccca tgtggcanat caccagggca nganatcang  480
a                                                                 481
```

<210> 5896

<211> 468

<212> DNA

<213> Homo sapiens

<400> 5896

```
gagatgtagt cttgctctgt caccagggt ggacatggtg gtttatacca agttcctgta   60
aacaggttta aagtatcaaa tgcttataaa tgaattttta aaatatgaaa attagagaaa  120
atgaaaagtt attcctgtaa taacttgcct ttttacttg tattttcata tgcttttagtc  180
agaaaaggct agtgaagcat ccaatgcaca ggggatgcat gtaaaggact gtgaaccact  240
attcagaata gtctcctaaa cacacaaaca ttatccatga acacacagcg gtctaaaatc  300
caggttgatt tctaatactg tcaattgctg actgggcatt ctaaggcatt ttaaatttat  360
acggtttagg ttccacaata taattaacct attcaggtta actatattat attctcaata  420
atactttttt ttttttctt ttgagangaa ancttgnint gnnccan                468
```

<210> 5897

<211> 567

<212> DNA

<213> Homo sapiens

<400> 5897

```

aacagcttgt actttattac atatgcaacc ttgccatgcc tgccagttaa ctccccctccc 60
gccaatgtta tcctcatgat atcagctccc tcttggggcc actgagctgc ccccccttcc 120
ttctgggctg gagtagtggt gcccctcaag caggcaatgg gcagggtgag gtgggcataa 180
ccctcaggtg acacctggca gccccccagc ggatcccccc gtgcagcatc aaagccagct 240
gagaccagca ccagtttttg gttaaactcg taggcaatgg gaagcaccag gcgatgccag 300
gcagctaggt agtcagcatc acccatgcgg ggcccgttcc atgccacgtt gacggtgaag 360
cctgtgcccc cagcccggcc gatctggctg ctggaccctc atccccatgg ggaaagaagg 420
tgccatgata atagcgggtc anggacacat atagcacact tggggtcata ctcaacatgt 480
gctgagttcc attaccgggg tggacattcc aatccacaat caggatccga aggcatgcca 540
ctgatagctg ggcattggca acancct 567

```

<210> 5898

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5898

```

gcactatata gatcagagtt ttacggcaa tttttccaaa aggccagagg agtttttaaa 60
ttctggtatt ataatttttt tggctctctc caatttaa atctgtttc taggcaaaac 120
agtgtgatga agagtaaaat gtccctgaat gaagaccacc atgtggcccc tctgtgttcc 180
ttatacctcg gcagtctgcg atctccaatc ataagccaac agcatgatgc ctggggctgc 240
ggtgcccaca gcacgcgggc tagaagaagc tctcagcttt gatttagtgc tccctgaacc 300

```

aaccaacctt ctttcaagct gcttttcatg agaaagtcca gtccagagca tcagccacag 360
 ctgctccttc tagcccatat tgttcaccag gaaaagaaaa cctatttaga gccaaagaac 420
 acacaggtga agcagaacac caaattgctt ttggcaggaa acaccactgg agaagtcaag 480
 aaatctaaat tatgttgagg ccctgaagac aaggacactg gagncttaca gacggaggac 540
 ctgnacttag gaaagcacct gtg 563

<210> 5899

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5899

gaaagaaaaa ctatttattt ctttatacac atcttgctta aacaatcacc aaaaagactt 60
 tcattttctg tcaccacccc tgtccaccag ttatgttggc cttcaatatg tggcgttagc 120
 aacatatata aatctatata atatatttat acacacaaac acattctacc agcactgtga 180
 agacacagac taggctttac taggcttggg gcctctccca tgccacttaa aaatgagcac 240
 aggtttgctc tatgcaagaa tttcaacaga gttggtctgg ccatcagtct gcaatttccc 300
 cgagataaga tagggtgaca aaatgggaca gcaactttga agtgaggcca gtccaatttg 360
 gatatacatag aagaaaagaa ataggatgtg ctaggttaag cctgagatgg tatctgggaa 420
 atcaccatt catgatgtga actcaaagac acangtgcta cagtggcaga cccaagccca 480
 acctgctnga ccacangggc aagtgtggac tgggaatant ggtactgggn ccccccnaa 540
 atgtccggan gggacct 557

<210> 5900

<211> 545

<212> DNA

<213> Homo sapiens

<400> 5900

gcttgtaa¹at tgtgctttaa tttctgcaat cagatatgat gcagtgagat acaagtataa 60
 actttcattg tgcattccaga aaataaaaag cacaagtata caggtttagc tcaacagctt 120
 attcccttat aaagaaaaaa aaagttttga attaaagcta gtttatcttc agtgtaaaaa 180
 cttggaggta taaacaaact caagatatta tatacagtaa attaat¹ttac atttccaaac 240
 ttgcacagta cagcatttta aacaaagtaa atggctcat ttcagctctc actgttaagc 300
 ataatccaca tccaatctc agataaaaat ttcacaatat ataaatccat tgagaattct 360
 gtacacaaat acgagttata gaaatctgat ttcaaatata aatacaaaaa ttgtcatgac 420
 cttacacgtt acaacagctt atttttctat tggaatttta aaaaatcata gaaaaatag 480
 tcaatgcaca ttcactgnta tgaccaangg catgaacctt gggnctttna ancatcctt 540
 nanaa 545

<210> 5901

<211> 167

<212> DNA

<213> Homo sapiens

<400> 5901

aaagttttca gactttat¹ttt cacagcgatt gacacagaaa catactagag ttagtaacac 60
 ggcaccacgc cccaccgccg cccgcttcat cgggtcctgc tcctaggagg actgggctgg 120
 ggctgggggt ggggatggga tgggggtggg gaagggacgg nnnnnnn 167

<210> 5902

<211> 530

<212> DNA

<213> Homo sapiens

<400> 5902

cttttttagag acggagtctt gctcttttgc ccaggccgga ctgtagtggc gctatcttgg 60
 ctcactgcaa actccgcctc ccgggttatg ccattctcct gcctcagcct cccgagtagc 120

tgggactaca ggcgcccgcc actgcgcccg gctaattttt ttgtatttcc agtagagacg 180
 gggtttcacc gtgttagcca agatgggtctc gacctcctga cctcgtgatc tgcccgcctc 240
 ggcctcccaa tgtgctggga ttacaggcat gagccacccc acccagaaat ctctttatgt 300
 ttaagaagag gaaagtgaag aacggaaagg gaagaaactg cccatcctca tgggtaactg 360
 agaggaggga tggggagaga gacttccctc ttctacttcc ttttttttc tagctcccag 420
 ctnttcccac tggcctcatc tggttcattt ggttcaaggt ctaatgatgc attttgctgg 480
 gncctttcca attcttaatc ntgtaaggnn ggaggnaaaa gngtgagtnc 530

<210> 5903

<211> 551

<212> DNA

<213> Homo sapiens

<400> 5903

aacagtcttt atgggcttaa atgtagtaga tatcacctgt gcatcaagca ttacacttca 60
 ttcttttaag atgtgcttca tcctcactca agctgcttgc caccctccga tttctgggtcc 120
 agtctactct tgttactctt caccatgtag atgaagtagg caagggtctc tttttcattc 180
 acaggatatgt tcctgaagtg tcgactcaca gtttctgcta actgggcctt attgaagcct 240
 ggtctgggtct gcaacttgta gtgtcgttta taacgtcgta ggggtgttcac ctgcagctgg 300
 aacagatcaa cctcaggaat gtcagtgtcg tgctcgggag aatctccgcc atcgtcactt 360
 gtcttccctct tccttttatt tcggacactc tggatgaaat ttttgtgaaa atcacagata 420
 tatagggtgcc ttacgtcttt gccgatgtcc agcttgagtt cttctgcgag atgctctttg 480
 gaccctcttg ctgaaggaag cgttgccccg nggccggacg canngcttgg ccgnnctcga 540
 tgaaggaana n 551

<210> 5904

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5904

```
ccgagacaga gtcttgttct gttgccca gctggggtgc aatggcgcca tctcggtca 60
ctgcaacctc cgcctcccg gttcaagcag ttctcctgcc tcagcctcct gactagctgg 120
gattacaggc gctgccacca tgctcggcta atttttttat ttttagtaga gacggggttt 180
caccatgttg gccaggctgg tctcgaactc ctgacctcgt gatccaccg tctcagcctc 240
ccaaagtgtc gggattacag gagtatatga atgcttttat ccacaccact aagaagagaa 300
ttgaacatgt tttgaaaaca caagaggaaa ggcagaaact tcattacaaa tattctaagc 360
agtttctgac tttgtttcaa gattggaaca cgaacagtga aggctgagga accagaggaa 420
caaaaactag ctacaatgtt tcgagagcaa caaaagagtt gncataaagc tanaatgggt 480
taaaagacng agaccctgga accaattaaa ctggaatcag caatttctac ggggttgag 540
gacttnaana gaatttnaat tctt 564
```

<210> 5905

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5905

```
gagatggagt ctggctcaat cgcccagact ggggtgcagt agggcaatct cggctcactg 60
taacctccac ctcccagggt aaagcaattc tccacctcag cctctcgagt agctgggact 120
acaggtatag tctgtatacc tgagattaca ggcgcccacc atcatgccag gctaattttt 180
gtatTTTTtag tagagacaca gtttcacat gttggccagg ctggtctcga actcccaact 240
ttcagtgate caccatctc ggcctccaaa ggtgctgggg ttataggtgt gagccactgc 300
accgggccag ctcatTTctt tttggtgctg attgatttcg tttgtgtcac actggctggc 360
tggtagaatt caccagtaca accatctggg tctgctgtct agaagctgnt ttaagtttat 420
atgggtatTT caagggaact agnctatTTT atctaattta tcaaatatgt gagtgagagc 480
ttatttatct attctcttac taatcngga tttaatccat gggattagcn gaataccct 540
ntttattccn aaatnggcaa t 561
```

<210> 5906

<211> 587

<212> DNA

<213> Homo sapiens

<400> 5906

```
tcggcccaga aggagacatg gcttgcttgg ctggctctaa aggcttggat ccatctcctt 60
tgaaaagaaa actcgatttt tctttttttg ggcctgggtg gtctattagc acattttcga 120
cttatttttg gagatgctct catttcctgt tcatctttca gtggtgcttt tccaatgcta 180
aaatgaactt tatttgaacc ttcattccaca ctcttaaatt cactgctgtc atcgaggtg 240
ctgtctgtta gactatttgt ttttaaagta cttgaggtgc agacttcgac cacctcactg 300
tggaggtttt cctgtaccac atggggagag ggagctctat tttcagatcc aggggaatct 360
gtagaatcct ttggtactga ttttggtttt ggtgacgttg accgtcctct caaaggttct 420
gtgaggggca ttttcttctt gcggagggtg tctggatcaa gtgtgtaaga gtctgattta 480
gaacgttccc gangaggatc aagctttgnc ttaacaggag cagtactttt ttgangnaaa 540
attttatcat gtggtgaaga agaacctgga naactacncc cnatggc 587
```

<210> 5907

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5907

```
gtttttgttt tttctggtct aaatagaaaa agggaaaggg aaagtaaatt cttagggcca 60
gacctcgaaa tgccccaagt gtccaattgg cagctatagc atttgtgagg aggttccttt 120
gccctcagac gagtagtttc aacatttcag tgaaaacaaa ggttgcagaa agctgaaaac 180
ccagatcttg aagggtgctg tcatatatgt gtttgtgttt cttatattat ttccttttga 240
cttcagtttt gcatcccaaa tatgtatggg gtggcatttt aacagtcaat gagtcaaaca 300
```

gtcaaaggag gacaggaggg gagccagctg gtaggagggg gcagcaaccg tgtgtggacc 360
aagcgccatt tttgntttat agacgtgtct tgaagggatg gtcccagaat atacaaaata 420
tacaatctgn cctaataacc accccgcttg cttgcatang ccatttgatg gcctnaaggc 480
agctttggag ttgaaggcag tgncaactact tggaatgccg gtagattgag acccttctgg 540
atgtgtnaat gtggcatgac cagta 565

<210> 5908

<211> 551

<212> DNA

<213> Homo sapiens

<400> 5908

gaggtagggt ctcatctgt cgcccaggct agagtgcagt ggtgaaatct cagctccacc 60
tcccaggttc aagcgattct catgcaacat ccacctcca ggttcgagcg attgtcatgt 120
ctcagcctcc caagtagctg gaattacaag tgcccaccac cagcctggc taatTTTTTg 180
tattttcagt agacacaggg ttctgctatg ttggccaggc tggctcttgaa ctctggcct 240
caagtgatcc gcccacctcg gtctcccaaa gtgctgggat tacaggcatg agccactgtg 300
cctggccgaa cctctgcttt taaccccaat ggatttaagt agcatttaca agaggtagtc 360
tcaaactgac acgttttact ccaggataac ctcccaagt cccttgaggc tcccctacac 420
tggtgagtaa acaagctgta ccatggngcc ataaagaaat ggctttctac ccaangggac 480
ttaaattnga gagaaaaagn tncaaggctn accaaggatg tggaatattt ggacttntta 540
aataccgntg g 551

<210> 5909

<211> 567

<212> DNA

<213> Homo sapiens

<400> 5909

gagacagagt cttgctctgt cgcccaggct ggagtgcagt ggcgtagcat gatctcgggt 60
 cactgcaacc tctgcctcac gggttcaagc aattctcctg cctcagcctc ctgagtagct 120
 gagattacag gcacccacca ccacaccagg ctaatttttg tatttttagta gagacggagt 180
 ttcaccttgt tggtcaggct ggtctcgaac tcctgacctc aaatgatcca cctgccttgg 240
 ccttgcaaaag tgctgggatt gcaggagtga gccaccgtgc ccggcctgcc tactcatttt 300
 cagccaaaaa attaaaacac accaacaagg gaatacagtt atttaataata tgggaaaaag 360
 gggaagttat atgacagcaa tattctataa aggaataaaa acggaagaaa aggaaacatc 420
 tgaattgggt catttaagca gtctacactg nactaccatt tacaaggaaa acgcccaggt 480
 gacaaacata ttccaagctg gggaagtcag actcttgttg aaagggccca gagtctatca 540
 gtcttgnga ataagcaaaa aactaan 567

<210> 5910

<211> 568

<212> DNA

<213> Homo sapiens

<400> 5910

cataacaagc attgtactat ataatactgc tcaggtaaaa gactgacttt tctaaagcgt 60
 aagtctaatt gtagtactct cttcttgaac ctgttccatg gctttgaagt ttctagcctg 120
 agtaactgat cagtatccat cttgttttat ggcatggcta ctgtaccagg agagatacaa 180
 gtgagaagtt tgtgggctgt gtggaagtga agatgaccag gcccctcaaa aagaaggga 240
 gtggagatgc tcccactgga aactatgaaa aaggagaaca gaggctgtac tggggcacca 300
 ggaagggaga atggaggctg agggcagtg cagacaagaa agctcctgca actccagctt 360
 agtcgttgca tgtgagatac actgttatgg cgtaggtgga aatcaattca ttacgcaac 420
 aaaagcaata gacataccag taatccttgc ccaaataaat tccttttctg agtcaggaat 480
 cataccatct ggatctacgc taggtcacta cctttaaaaa taattattaa tcncttaatt 540
 tagatntaat ctgaacaaa agtcggcn 568

<210> 5911

<211> 380

<212> DNA

<213> Homo sapiens

<400> 5911

```

aatttgctgc taaatgaaaa gcaggtttgg ctttattcat gttaccgtaa aaactaaata   60
ataaagtatt cacaccaagc gtgaattttt ttttgccagc aaaagttaaa acatcaaaga  120
aacctctttc aaatactaac aaatttactt acaaacacct atatttatta tttcataaat  180
aggcncaaca ggttccataa aaaaagatta aatacagaca cagtatgaag aaacaataag  240
acagagccat atgtaaaagt tgtaatttag ctgtttccaa tctgtttctg catctaataa  300
aataccaggt aagcatttgg cagttttata cataaaagga cttaaaggac attactaac  360
cnttncncaa aangngntnc                                     380
    
```

<210> 5912

<211> 570

<212> DNA

<213> Homo sapiens

<400> 5912

```

agcatgcaat tttttattgn tttctaaatc tatttgtaca cttaatatgc tagtattaat   60
ttcacaaaca gtataaagaa tgtactccaa tgatattacg cggcaacaac tcacctgaaa  120
aagaaaacat tgtctctgaa ataattccta attatacaat ttgcaaata agcactataa  180
atgttaaaat gttaagactt cagtgtataa tgtcaataac atcctgcctt tttaaaattg  240
ctttaggtaa ttcgtaggtt gtaaaaacta atgagaagta aaaaaaaaaa attatgaagg  300
tattacaaca ctcccattaa aatgaaaatc tatgttacga ctttatgctc ttcaaatacc  360
acaccagact gaagcatcaa ccagtatatc aagtgttctg ntccttaaaa aatcgctttg  420
gttatggggg agtgatagcc ttgcttatta attttcaaaa atcctgccta ggtatccttt  480
agccngaatc atcttccaat tacatgggcn tcaaaattac cttttaatca gcaattcatt  540
ggngggctaa atggaaataa ttgcccgan                                     570
    
```

<210> 5913

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5913

```

ctaaaatggt ctggtctctc tgctgtaaga gacgcttaag tgacatcact tcttctttca 60
attgacttat aaggacaaaa ttgtctgttc cccactatc tgctgactga tttatagagc 120
tgacagaaat ggatgcaact ggcaaattac cttactaatg gcacacatta catacaccta 180
tctccattag atggcttaga ttccaatttg ggctttttct ttggagtffc attctgaatt 240
gttgcagagg atttatggct ctgtttccac agtccctgct cttcttctgg acttagattg 300
ctgattttgt gatggctact gctgtgacga tggatgatgt gatgatggtg gtgatgatgt 360
tttgatgat gctggctctt ctcagtaaga gatgaagaag atgaatttga atgtgaagat 420
cccaggctct tccttggctt ttgcttctg taaactcttt tgnaccataa agtncagagc 480
ccgcataata ccttncatna ctttcttctt ctttctctct tccaacaaaa cncatggtgg 540
tgccctggtc acaggtttga gggg 564

```

<210> 5914

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5914

```

aagacatggt ctactctgt caccctggct ggagtgcagt ggtgcaatca tggcttgcag 60
cagcctttac ctctgggct caagcaatcc tccacctcag cctcccagta gctaggacta 120
caagcgtatg acaccaagcc cagctaattt ttaaattttt tntagagatg gggctctcagt 180
atgttgtcca ggctgggtctt gaacttctgg cccaagtga tcctcctgcc tcggcctccc 240
aaagggctgt gattacaggc atgagccact gcactcgacc tgaaccaggt gttacatggt 300

```

aaactgtgac tggcgtgtc tgggtgggct gccctttggc tctcctgatt cttcagtaaa 360
atcttgcttt tgngatcaag tttggcttaa ctgggctgca ctgcaggcaa tggaanggct 420
gtcctggggc tgacaaagga agtggtggca gggactagca agaacgccat gaaaaagggc 480
attttcanag taagaactaa ggctggtacg tccacctgnt tttggggaaa tggntccaaa 540
agacctggtt aaaaaaanna ncnggtttcc at 572

<210> 5915

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5915

agcttgaaac aataaattta ttcccatagt tctggaggcc aggaagtcca atatcagttt 60
tateggtatc tgtagggcca tgctcctgct ggaagaggct ctggggaaga atctgttctt 120
tgcctcctcc agcttctggt ggctgtcagc attcctttgc tgcggctcca tcaactcaat 180
ctctgcctct gtggtcactg tgctttctcc tcttctgtgt ggtaatatct ccctttgctt 240
ctatataagc atagatgtag ctgcatttag ggcactccca gattaccag aataatctct 300
ccatctcaag actttaactt aatcatactt tttgctatag aagagaacat ttccaggttc 360
cagggtattg gtatagggga tatcttttgg gaagcataat taagcctacc acaagttcct 420
aaaagtgttg aaatcatttc ttgngccaa gtaatnaag ttgnggttt gnggtagaaa 480
acaaacctgg aaaagaaacc cccgggnaaa gtaattttta aaaaggccgt tcaacaaaag 540
aaatggtnnn aaaaaagaan ttcataaagg gggattccaa na 582

<210> 5916

<211> 569

<212> DNA

<213> Homo sapiens

<400> 5916

gagatggagt ctcgctctgt cgcccaggct ggagggcagt ggcacagtct cggctcactg 60
 caagctccgc ctcccgggtt cagccattc tcctgcctca gcctcccagg tagctgggac 120
 tacaggcacc cgccaccaca cctggctaata tttttgtatt tttagtagag acgggggttc 180
 accctgttag ccaggatggt ctccatctcc tgacctgacg atccgcctgc ctcggcctcc 240
 caaagtgtg ggattacagg cttgagccac cgcacccagc ctaatttttg ttttttagt 300
 ggagacgggg tttcaccatt ttggtcgggc tggtcttgaa ctctgaggc ctccatgagt 360
 catctcgctg gcccctccat aaccagctca gtgtctgtgt gtgccaacaa ggcataggag 420
 cctgggtcgg cccaaagaca atctgcgtca cacactgtaa accaaanggt ccttggggcc 480
 caagggtctg naacctggaa tcgcttatgg nggctgggaa tgatactggg gattctggac 540
 tggttctgaa anatggttg cacangcn 569

<210> 5917

<211> 569

<212> DNA

<213> Homo sapiens

<400> 5917

atttgacagt ctactctgt catccaggct ggagtgcagt ggtgccattt cggcccactg 60
 caacctctac ctccagggtt caaatgattc tcctgcctca gcctcttcag tagctaggat 120
 tacagtcaag tgccaccaca cctagccaat ttttgtattt ttagtaggga cgggggttca 180
 ccatgttggc caggctggtc tcaaaactct gacctcaggat gatcctcctg cccagcctc 240
 ccaaagtgtc gggattacag gtgtgagcca ctgcacccag ccgaaatctc catactattt 300
 tctataatgg ctgcaccagt atgcgtttcc atcaacagtg tacaagagtt cccctggctg 360
 ataaaagctg gaaacatctt gaatcaacaa cctaacatca caattaaaag aactagagaa 420
 ccaaaagcaa acaaaccaca aagctggcaa gaagacaaga aataaccnag atcagaagtg 480
 gactgaagga gatcccgaac cgaaaaancc ttcaataaat caatgaatcc aggggtggct 540
 ttttgnaaaa attantaang agctctttt 569

<210> 5918

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5918

```

gagatggagt ctcgctctgt gccaggctg gaggcagtg gcgacagagc gagacttcgt 60
ctcaaaacaa acaaaacaacc tcaactgtcc aggtgagcct cacctcaagc agttgtcaca 120
gcttgataat tgttgttttc tgagagggtt tctttggaag cctgccacag agagtggctg 180
ggggaatggg gggaaaatcc atctccatt ctgagcccag atgtacctca acacccatgc 240
ctgcttccag gtgcccttgg ggggtccctc cccacagagt gcagggttct cacagcagtc 300
agtcttgcag aggacctggg tagacatctg gtcaccattg aaggggctgg ggccaagcca 360
ggcaggcagc cctgagccta agtgctactc agaggcaggc cccggagcat ggctggggga 420
tgtcactgac attccgggtn ctgcttggtg gggactttct ggcangactg naatgaagtt 480
gatcactctn aaggctgggt tgnttccttg aggccttgn taaaancccc aaatccggtt 540
caanaaggcc caggaaggg a 561

```

<210> 5919

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5919

```

aatgttattt atttatttat ttatttgaga tggagtcttg ctctgttgcc caggccagag 60
cgcagtggcg cggctcggc tcaactgaac ctccacctcc tgtgatctcc tgacggtgaa 120
ctcctgactt tgtgatccac ccgcctcggc ctccataagt ggtgggatta caaggagag 180
ccaccgcgcc cggctttttt atttgtttt ttaaagtgtt agtagagatg cagtctcgct 240
atgttgtcta ggctggctct gaactcctga gctcaagcta tcttctccc tcagccttcc 300
aaagtgttgg gattacaggg gtgagccacc gtgctcagct gctaaagact tttaaatacat 360
aaggaaaagg ataactgcag gaacatcatc aggaactcag acgcctggca aaggtaaacc 420

```

acactggggtt cttatgacag aaacccttcn tgattccttn accacccccca aatcttcctt 480
 ttggccagca acctaagctt naaaaaaagg gactgccttn ttactacctt gaagaaaggc 540
 nctttgancc nggattt 557

<210> 5920

<211> 562

<212> DNA

<213> Homo sapiens

<400> 5920

aagctctctt atttgcgcc ttaccacatg gacatcattt tgcaactctt tggccaaagc 60
 cttcacaaat gtggtgaact cttctacttt ttcatggctt aacagcaatg tcttctgtgc 120
 accttctagg acctgttcac ttgcaatgc taattcttga agctgcttan atgctgctgt 180
 ttcaatttct gccattacag attcagtctc acttattctt gatactagga gagtaagctt 240
 gagatccttt ttttctaact cctcttttaga tttctgatac atctgttcat actgtgactt 300
 ttctttttaca gcaacgttaa gtcttttgctt tagtgaatca attgatacct tcttgttgga 360
 acattcttca gttaatgnct ttaccttttt atcaagattt tagnaacattt cactaaaact 420
 cttggtactt tncaaattta ctttctgtcg aaanttcaag gncctctatc aaaggctttc 480
 ataggtatat ccctctcatt cgagaaactt ttcattgcatt tccttanggg gcctcntttg 540
 caggagtcaa atttnaagcc tc 562

<210> 5921

<211> 581

<212> DNA

<213> Homo sapiens

<400> 5921

acaaattgct tactttattt ctttaacaat gaaatagtaa taacacaata attcagttgt 60
 aacaaagcca ccaacagagc aaaacaaaaa caaagctaata taagaagcat tgcttcagct 120

caaattagtt atctccttta aacaggaaaa acgaccatta gtctactggt tctcaaccct 180
 gtctgcacat gagaggaatg gagggaaaca ggacaggtgt ttaaaaaaat agttatatcc 240
 aagaccacc tcagaactat taaatgagaa tctctcaaga gtgaggccca ggcaaagatt 300
 tttaaagtgc tgtcagtgtt gaaaactaca ggtctaaagt aataaggaat aaaaccatgc 360
 ctcgaagcaa ttcaaaacca agaagctgat tatacaataa attttttcct ctaatcctgg 420
 gaaaacaggg gggaagcang gccccgatca gtttcatttt ctttatectc ttcagttggc 480
 catagtaaga gcntaancca catcaaatat tggaagcttt tgcaaaccgc ctncccaaa 540
 tggaatatc acttcctttc cntttagaaa gctnttttaa a 581

<210> 5922

<211> 538

<212> DNA

<213> Homo sapiens

<400> 5922

ctgggtggta agatgcctct ttattgggtgc tggagctgtt cctgagggag caggccatgg 60
 gaccctcatc gggaccctcg cctcagcta cttccgcctg cgggggatac tctgtcccaa 120
 gggatatctct tctgtcagct tctgtaacaa gcgggcctgg taagcagggg gatcctntcc 180
 agccaaaggc tgggggcgta cgtgcaggta gcgctcagtg gccgtctcca gctcttcac 240
 ctcatacaag gnggctgggt ccagcgagtg ggcatatgat aggctcacia gatactcttt 300
 gtagtgtgcc tggcacaggc cggcatagcc agctggagtt tccttgccac aagcttcgtc 360
 cctgagccca ttgggaacct cttctgctc tatcactcgg cagcccgtt cagggactgc 420
 ccgggccccca actggaggct ctgnattaaa catgacgtta tggcctgtaa caacttttga 480
 acccgaaaac aatccaatcc ccaggtanaa aaggcaatct tnaaggngt ggnccnnc 538

<210> 5923

<211> 548

<212> DNA

<213> Homo sapiens

<400> 5923

gtttgagaca gagtttact cctgttgccc aggctggagt gcaatggcac gatctcggct 60
cacggcagcc tccacctccc ggattcaagc gattctcctg cctcagcctc ctgagtagct 120
gggattacag gtgcctgcca ccatgcctgg ctaatTTTTg tatttttagt agagacgggg 180
tttcaccatg ttggccgggc tggctcctcctg cctcagcctc ctgagtagct 240
gcctcccaaa gtgttgggat tgcaggcgtg agccactgtg cccagcccag actcagcttc 300
tttgcaaaact ctaggagggc tcgcctcttt aagcccagct cagctgtggg ctagaatgat 360
cgtttctaat gntcattgca cttatggggt cagaagtaag gaacgggtga tgggtgtcaa 420
gggcatgccc tgctcantgg acccggggag aanactcaag ancctgaang gagatcggac 480
cttgntaaa tttgctaagg cataagttac acgaacaaa aaggcttccc anggcccttg 540
gcacctng 548

<210> 5924

<211> 555

<212> DNA

<213> Homo sapiens

<400> 5924

gactttgctg atggtttatt accttaagga aaagacttac acagagaaat tgagcaatga 60
aaaccttca cattgagcaa acacattcca cgctacacaa atcatgagaa aaatgagaac 120
tgttgtgaaa catgacagat tgcccaagng ttatTTTTcc tctattggaa aattctaaga 180
cgtttctca tgtgtagttt ttcagtcaca aaaatggcag taggaatatt taaatattaa 240
atcacagttt gaaaatagat acatacatac atatataac acacacaggg atacatagtt 300
gacttatgat tcccagatat gcagggttat cattngact gctttggatc aagacaagtt 360
tgtaaaaagc agcgacatag ttcgacataa tagtcaggag ctagattact tccctgtaat 420
tgctatgcac acacagtaca aggctagcga gattatagac aatcatgtca ttcgaatcta 480
ctatctttgg ataacttgaa tcattttcaa ggttaaaatg cgcttttggc agtaaagcgc 540
ctttataang gcatg 555

<210> 5925

<211> 567

<212> DNA

<213> Homo sapiens

<400> 5925

```
cctttgagac ggagtctggc tctgtcacc caggctggagt gcaggggCGT gatcttggct 60
cactgcaatc tccgcctccc gggttcatgc cattctcctg cctcagcctc cagagtagct 120
gggactacag gcgcccGCCA ccacaccCGG ctaatttttt gcacttttag cagagacggg 180
gtttcaccgt cgtagccagg atggtctcaa tctcctgacc tcgtgatccg cccgcctcgg 240
cctcccaaag tgctgggatt ataggcgtga gccactgcac ccggccatgg cattctttag 300
ctacgaaatt ttgttagtaa cctgaaggaa gagtgaaggagg ctgaccttaa taccctaata 360
agattcaggc tatggctaag tgatccctgg gtcttataaa ggaaactgga ggctactggg 420
aaagctcagg gatcctgggc catggncctt cactctggat aaccaattca ttctcctnat 480
taccctaataa gttcctgggt nacaccnana gaagtcanaa ggaagggggc atnggatagg 540
ggagaagagt aaaattttan tcttcag 567
```

<210> 5926

<211> 551

<212> DNA

<213> Homo sapiens

<400> 5926

```
caatccgttg gagacagatc atctcccact ttcaaaggca attcaattgt ggtttttgtt 60
gttggttttt ttgtattttt ttgtattttt tttttttttt acaagtaagc gtctatgcag 120
gcatcacaaa ctttggcgga tacagtanat atgtatttct ttgatgctga aaggtcagtc 180
cctaagacaa aatcaaatgt ctcaaagaat taaaagcaaa atgcatgtgt cttcctggca 240
aaggtttcca tttgcaatgt aatctgcatt tctacaaata ctcaatgtcc aaggccacta 300
```

gaggggtgaaa aaccagggca gcgtnnttcca gcaggagtca gggcaaacc agagccaaaa 360
ctccatcctc agcccaacct tggaggccca acaactgggg ctnaaaaagn gggcccaggc 420
aacgccaggc ccttactggc cgccaccctn tgtgggctgg gtgcttgggg ncnagggatg 480
gcctgccttt tctgagcccc gggaaagggtt gttgccgggc tgnnacctt tttgaccca 540
gtnnaaacag n 551

<210> 5927

<211> 558

<212> DNA

<213> Homo sapiens

<400> 5927

gtctaagaat gttcatagca gctttattca taacagtaaa aaacaagcag aaagagccca 60
gtgtccatca acagaaagat aaaaaaacia actgtgatat attcatacga aagaatactc 120
agcaataaaa agaaatgaat cactgacaca tgcaacaaca tgaataaatc tcaaaaacat 180
tatgctaagt gaaagaagca ttacattttg tataatttca ctcatatgaa gtttagaaca 240
ggtaaattta acctttgata taaaagaatg agaacagtag ttataacctga ggggtgggga 300
ggggatagac tgggagaggg atttaggaaa ctttctgaag atgattgcaa tggctctaat 360
tttgaaaagg gtttgggtta cacagggtga tatgtctgca agaactcagt aaatttatct 420
taagatttga cattttattg caggtaaatac ttaaatacnaa aaatttaaaa actaaataaa 480
tnctaancct tagttaataa tctgcagttg aagtactnng gggaagtttt tcacaactgc 540
aatttttttt gaatccan 558

<210> 5928

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5928

caatgtcaaa tgcactttac tgggcccctg ggccctcccaa cactgtcctc accaaggctg 60
 gggcacccca ttcccagcac caccagctgc ccaggaagca ggacggatag agggaacaca 120
 tgtggaatgg ctgttctcct accccagagg gtgccggatg atgttgacag cacggctgct 180
 tccctctccc ctgcagcttc tgtccccacc cagcagcttg gcctttccca tagcaggga 240
 gggggatacc tggggcttca aaccagccac ctgctcctgc ttaaaatggg gcaagggggcc 300
 atttgcaaaa ttcttcgagg ggcagtgggtg aggtagaagg ggtggcagcc tgctcctgtc 360
 tggganaggg ctgggcagac actgggagcc gggcagacac tgggagcccg ggctggctct 420
 tgcttcaggc ccanaaccct gggccctgct cgctgaggaa actggtggnt ggaancgcca 480
 aggttaacca gcttaagctt gaaggagtac ttggtgggca anaagggtan ccagtccaaa 540
 tnggttttct taanaacccc aan 563

<210> 5929

<211> 563

<212> DNA

<213> Homo sapiens

<400> 5929

actttaaaag tgcttctcgg tatagaacaa agtaaattt acagttttgt tcaacagcag 60
 ccaagattta attgtctgtg aaatataagg cttacgacct gagtcgagtc cactactgtt 120
 ctgctgatac aaactaggct ggcctacgag gtgaccgaac gcaccagca gctgatttac 180
 acagaagagc catctccaaa gaattaaaag tgggccaggg acagccacac gcctgcagga 240
 gtccatccaa agggttaggt gctttattct ttctgcagca gatttaaagt gactttgtac 300
 aaaaagtcaa acaagaataa acagctgtgg aaaatgtaac aaatcatgct agcagttgaa 360
 cagcgaggga gaagggaat ccagcaaacc gctaacatgc actgaagaaa agcgagacgg 420
 aggtagaaga gagagggaag gtggacagaa aaggaagccc ggtaaggaca cgacactggt 480
 ttccacacgc gaatcacgca ctttantatt ggggatagct caatgactgg tangaacctg 540
 aaagnatgnc ntnaccagtt ttg 563

<210> 5930

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5930

```

gagaatactg gaccatcatt aaatgtgtac tgtgaagaga ttaatatgta tgaagggtt 60
taccaaagtc cactaaataa acactactca agtacagact gcaaaccaaa atgtatctgt 120
gttacgacat taattgcaaa tagcaagtat ggtgctaaag tctacaccaa tggaattaga 180
tgagtgtctat gcacttaatt ttaaaataaa actagttttc agtaaaatgg cttcggtatt 240
tttgttttaa atacaaactt gtatatattgc agctctagtg aaccatctca tcatgtaatt 300
cagacttgga atcatgattt tatttactaa aagccatcaa gatgtagaat atagccatta 360
gtggcataaa acatccgttc attgcgtatt ccatactgag cattaaagcc cacaaaagta 420
tattggacac cactgggtgcc tttttgagct taaaatcagt tggtagtatg ttagcaacta 480
cnggatctaa ttattcacia tcatgccagc atcagaaaat ctggaagttt gatgtcnaag 540
tngggccccg aaaatggta a 561

```

<210> 5931

<211> 558

<212> DNA

<213> Homo sapiens

<400> 5931

```

atggtattaa atataagtct tagcaccttt ggcatttttg tccaaacaga cttcgacata 60
tgaagtgggg acataaccct cttcatcttc atttctccga atgcgggtcc agccatcgcc 120
tttgtcttcc tctatgacat acaatgtttc tccttcaact acggaaatcg ttccctcatt 180
ctgaccttca aatgtgtaga gagctttgca cgtccctatg gcaggaggagg gctcctcatc 240
atcaaactcg tcgtcaaaaat ccgtggccag caccttcac tcactctcct gactctgctc 300
ctctgtgtaa ctgccatctg ggctctcacg gtcctgggag cagttgttga ctgtgggtgg 360
gttctggctg tcgtacagtc cgctctgccg gcgcgcctgc tcgtgcgtg ctgggagccc 420

```


ggccttcaac ctcagccagc caggcctcaa attctgggtc tctactcgca agttctctat 480
 atttggcttg actctgntaa ttgggatcca aactgggctg gggcttccat tganggatct 540
 ttaggagaca tnttcatt 558

<210> 5932

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5932

aagtaagaag atttataata gaaaaaagtg gcaaattggt actngnactt gattttctga 60
 aaacatctgc aaattcacac tggcattaag aaaaccaag tctcaaaaat tctcctttct 120
 ttctctccag ataatnggtt ttctgtgcaa aaataaatat ctgaaaattg cactaatact 180
 tattttaact tctatattat gaataatctg cacatgctgc ttacagacg atacatattt 240
 gtaaacttac tcatgcaaaa ttagtgtgcg caacagggat attggttaatt ttcatactta 300
 aaaatgatac cttattatct tttaaaaatt gccaaactct ctgaaatggt taacaaatct 360
 tatatggata ttcttgtctg ccagctaaaa atcaatttat gttgctgaaa acaaaaagtt 420
 atacaagaaa aagaaacatg gtttttggtt tgcaagattt ttgattttta aatgagaaaa 480
 tttntaaang gaaggaaatc tnggccccaa aatttaaccn tttaatccta accnttccgg 540
 ggaaatggat ccg 553

<210> 5933

<211> 559

<212> DNA

<213> Homo sapiens

<400> 5933

aaagggaggt tggctcctgc atttccactc ttigaccata ggaacgcctg gctacaaaag 60
 gggctgtaat tggctgctgc ctataggggc cccaggtcct tcttccaatt gcaaggcagc 120

aactccgaag ttctaagtcc catggaaagt ggcagtggtt gggctggact gtggctggag 180
 gatcaccggg cctcggttct caagcaccat ctgtctggct gcagctgggc cttcagctg 240
 ggggccagtg ttgctttcca gctgccccca ccgggtcaga tcatctctgg caaggaagag 300
 ctgctggcat ctcttactgt ccttctcgca ggccttcctc caccttgggt gcctcctgac 360
 gcctgccccg gaagtcttca tcacacgcgt ggccctccac atcatccagg aggttggctg 420
 ttgacgccgg cagcccccaa cgactgatgc ttcaacaagg ggtttcctct ttgactcctc 480
 atttgggctt ctttgaaaag gttcggccaa gttnaacagn ttcctccggt ggactttcca 540
 aggggtttca anttgcctt 559

<210> 5934

<211> 560

<212> DNA

<213> Homo sapiens

<400> 5934

gctttaagtt ttaatgttta tttccccaag acagcctagc ctgcactcta cttggataaa 60
 ttttacaagc tagttttctg ctgcttctag ttttaaactt taaccatggt tctgatgaca 120
 aggaatgctg caaaaatact ctagttcaac aaagagttat gatcacaaaa taatttttat 180
 ccattctaca gtgtttcaga attaccagtt gattttttaa cacaaagtag atatagatgc 240
 taatgggtggc taatctggta tgtttcttat agcaaactgt tgttcatgca acacttgtgc 300
 tcaaagggga aggcacagga tttcctacaa tgagccacct tataaagagt tctttttgta 360
 caaattaatt tatgtcacat ttaatttagt gtgcataacc tcaaaactga ggtattattc 420
 caatttataa aaaccacttg cataactttt atgcaggttt taaaaatcca agtttctcct 480
 aaanggtca aaaatagatt ggtcatggct ggctacatnt aagataaaaag gatcttaaac 540
 cattggacng ataggcttnt 560

<210> 5935

<211> 562

<212> DNA

<213> Homo sapiens

<400> 5935

```

gagacggagt ctcgctgtgt ccccaggct ggagtacaat ggcatgatct cggctcactg   60
caacctctgc ctcccaggtt tcaagcgatt ttcctgcctc agcctcccga gtagctggga  120
ttacaggcac ccaccaccgt gccagctaa tttttgtatc tttaatagag atggggtttc  180
accatcttgg ccaggctggt cttgaactcc tgacctcatg atccaccac ctcagtctcc  240
caaagtgctg ggattacagg catgagccac catgcccggc cccaaaacta tttctaagag  300
aagtgttgaa agtgaggctt ggctccttcc gactgcttat agtaaaataa cagaagagag  360
aatgactta aatatgaaat tgttaggtaa aaaaggaagc agaacgtaaa gatttagaaa  420
attcttagac tatccatatt gcaaaacaag atacagtaaa gatgtgacca agcaaccatt  480
tgctaataaa atttgatgg atcaagcatt ttaacagaaa ncnggtatga tcctttagac  540
aatgggaaga atgaccccca ag                                     562

```

<210> 5936

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5936

```

aggtttattt attttattgn ttgtttcact gtttgaatgt ttatcttgcg agagtctaca   60
gaattgagag aaaatatctg caggctaatt ttacataaca tgaggcaaag attaagcact  120
aaatataaaa aataaaactt ttagcttgct tattaaacta ggaagaattt tcctgaaaca  180
cagcagttaa attggtctac aatgcattaa taaatggaga acacggatct cgcctatgaa  240
atattttaaa cattgtggac gctacaaaaa agctcattgg tatataaaaa tttcaagtc  300
acagtcctct aagcagacta aatacaagtt agtttttaac ctgaattcag aagtgcaaaa  360
tctgtaaaaa taaaaatatt tccattgntc tcagcaatct atggattaac cttacaaatc  420
cttaaagtct tttcagtaac atgaaccatg atctcttgac aagtccttgc ttaagggcaa  480
gtaacttttg aagctggact tctcaatctg nanagagaan ccagctgnat tcacagnatt  540

```

gntncctttg gaaaata

557

<210> 5937

<211> 550

<212> DNA

<213> Homo sapiens

<400> 5937

actgtattta tatagttttt actctatcag tcttgctgta gctcttggtt atgactaatt	60
tgaactatag gaattgatga ttacctcatt gatgactggg agaattaagt aggtaactcc	120
tattaatacc aactgaagtc tcatattata aaaaagtccc tgtgcatcaa gacaaaaaac	180
aaaatgttat caaaccaaaa tatctcagaa ggacaagaaa gggactatgg acactatgtc	240
cacaggcaac acactatggg ccattctctg aggatgacag acactcaaaa ggtcaaatat	300
accaatgcta ttccaaatta tttcttggtg agataaaaag atctttaaat gtatttaata	360
cttgtagaaa atcacaataa aacaagttgc aatatgattt tttttaaaaa aacacaaaac	420
attgaaatct aatttagtat ttagaacctg acattccccc agatgaaaat ttatatttgg	480
natttttggg tccatggcca ctacccttcc gaaagtatcc cggatggggc cttatcta	540
cattgggttt	550

<210> 5938

<211> 558

<212> DNA

<213> Homo sapiens

<400> 5938

aaatttcaca tgaaaaata tttattttta ttcacatcaa atacatttag aataaatcta	60
aatttttagc atcataatac ttacaaacaa acacagataa actttgggtg tataagtctc	120
cattctgtcc taaaagcatg tacaaaaagc tctcctgcaa ctattgatca tcacctggtt	180
gccttaaatt tctagatttt ccattttcag ttcttctctt tttgaagact ggggccactc	240

catctgccat aactccaaga gaagtgactg ttttttcttt aaataccact ttgggttctc 300
cgccaccatc agcttctgaa gttgatacat actcattttc agtgcttgga agttccaaat 360
ctacctctc atgagactca acctcttggt taatttcttg ccattctcca tatgggtttg 420
atttcttaag agttttcgat ttttcttcat ttgaacctaa ngaattcggt tctgaatact 480
tttttctttc tggggttctg ggcacttnci ncatcactaa ttttatntt tttccttaa 540
ccttaatttt ggnttttc 558

<210> 5939

<211> 545

<212> DNA

<213> Homo sapiens

<400> 5939

cctgggtccaa ctcagcagct ctatttacat aacagcgtcg cccacacccc gnggggcctn 60
tcacggcttc ttggctttct tcacggaaga tgagctggag gccgactccc gtcgntttct 120
cgaattgggc gtgaggggtg cgcccaccac atcaatgatg gtgtccttgg ggtcaggacc 180
aagtcgggt tcagtcactg ccggctcagc anaggccggg cctgggcctg atgctggtgt 240
ggcagggccc cctagcacac cagcccgggc cagtgcctca tgacggtgcc gcagcatctg 300
cagctcatac tcgcagttgg cacaggcctg cttgagctcg tagagcagca ccaggtcgct 360
tcgcagctca ttgaacatgt gcaccagctc ctccgtangt gtcggctcag ntncacacca 420
agctccagca gcatctgttc canggccttg actttttctg tcccacaaaa cttggcaagt 480
tcatccgtgg ctccnancgg gacactgaaa cttgaattgg aaactgagcc tgaagnttag 540
aacac 545

<210> 5940

<211> 576

<212> DNA

<213> Homo sapiens

<400> 5940

```

aaagagtaat ctttacatga tgttttaatt atcatacagt ataaacatta tcattttttt 60
cattaagata ggaaattatc attgttttcg ttaagatagg aaatgaaacc aaataaaatt 120
tgtgaaaatg tcagtcacatc ttgggaaggc ctcaaataaa caagggagag tcttgagctt 180
ggtatccttt catcttggaa gaattcatag ctgggaattg gctaaagctt tgcagtgggt 240
tgaatgatgg tttccaatga gatctgtcca tgccttagtc ttcagaactt gtgaatatga 300
ccttatttgg aaaaatggat tttacagggtg taattaagtt aggaatcttg agatgatatc 360
atcctggatt acccagggtg gctctaaatc acatgaaaaa tgttctcata aaaatttcag 420
agagagtga gacctgcagac accttcattt caggcttcta gcctncagaa ctatgagata 480
ataaattctg gtggnttaag tccaagatt tgggcaatgc atacagcact ctagggacta 540
atacagctcc ttaaagagag ttgaagaaan ctggng 576

```

<210> 5941

<211> 396

<212> DNA

<213> Homo sapiens

<400> 5941

```

cattggtaca aatgctttat tgaaactaaa tacataatac acacaaagag atgaagacaa 60
tatagaagtc cgcatagtca tcataatccc gttccttggc cggttgaggc agctcagtgg 120
ctgagcccag tcaagccaac ccgcagcttc actcacgact tcaagatttg atgctaattc 180
ttttggattt ctacagttat taaataagtg tctgagtga ctgtctttgt tcctttgtgt 240
tttgagggct ggctgggtag gagtgggggt ggtttgtctg tggcagtga tttttgccag 300
gagaggaaca ttaaagcca aaggtaggtg gcagtatttc agtctctgcc cnagccgaca 360
ggcagagaga ccttnacaan taatangacc nannaa 396

```

<210> 5942

<211> 554

<212> DNA

<213> Homo sapiens

<400> 5942

```
gtcaaagtca ctatttgggc cctaacataa tcctgctcag agcgacggaa aaaaggcaag 60
ccttttcaaa cataactctc tctacaagcc agctattatg gcaagggaaa aaagaaagca 120
tctagataaa tatctatcaa aattaacttt aagagaaata ctctctttcc ttaaaagccc 180
ttattttttg agacactaga aaataagtta ctataaaaag tgggtggtctg ggggctaaaa 240
acaaaacaaa aaaaatcctc ttttctacat tttttagttt tctggcatat ttttgaagat 300
tttacagtcc caaatgagtc aaatgcctat ttgttttttg aataaacaat ggacttgtca 360
tgtgatatat gtttctaaac ttaagtatta cagaaaacat cactatccat ttgtaaaaaa 420
ctcattctgg aaaatacctt tcccttgggt tggataaaaa naccttccat anagcttttn 480
gggaatcttg gccttgaaaa accaccggct ttcattaatt tcccccttna aaatcaangg 540
nccnaactt aaac 554
```

<210> 5943

<211> 567

<212> DNA

<213> Homo sapiens

<400> 5943

```
ctggaatgtg aaattggttt agaagccttc atatttgtaa ctctagcctt tgcactttct 60
aaaatggaaa tagtgtgtgt tgtctttcaa tctgtctctc acctgtggta gggtttttgc 120
agggtctggag gtagaaggcg cgcccttgga gaagggtgtc agcacagaga ctgctgcctt 180
atgctcttgg ctgaacgaag gcttggtgta gatggcgttt cccgctaact tctcaggccc 240
ctgctgtgtg tgaggctgtt ccagctccct tggggctgga ctcccagacc tttttcttc 300
ggcagcgttc tccacagatg cctgggcacc ctgttcctc ctgatgctct gccttcccac 360
ctctttgaag tgccttttct ggatgctcat tgggcccatg aggactctat tcactttttg 420
ccggttttgg cctacagttt gaatctttgc caggctgggt cctgnggttg caagtttaaa 480
tgaacggttg aacattgatt cccatctang gttactgntg agaaatatgg caaagnnact 540
```

taangcctgg tacatactct nggattg

567

<210> 5944

<211> 568

<212> DNA

<213> Homo sapiens

<400> 5944

atagctgac	aagaatttat	ctttattctg	attatgattc	ttcaaagagc	attagttggt	60
taaattta	ttaagccatg	cttaa	atcga	atacat	aatatgatta	120
cttatattcc	ttttgaccaa	agagctgaaa	at	ttgtgtgt	ccagttcatc	180
ttactcatgt	tattctgatg	cga	aacactc	t	aaatgcaaa	240
ttgttttgaa	agtaa	atagg	ccaagtggcc	taccctgccc		
tttttatagt	ataaattctg	tgatactgcc	ttcttttcag	tatatgctcc	tctgtgggcc	300
tttggttac	acggagacca	tcagctacaa	cgc	atggcag	tcagcttcag	360
agtcctcgct	ccagtg	tca	tctct	ttct	atgaat	420
tgagagtgac	tggcataaag	cttcag	ttta	tcattgatgt	ccacccattt	480
cacttttcca	gc	atcatctt	cagcttctag	cattaagaat	atccattatc	540
tnaccgggtc	gcatgggagg	tcacaagttc	tggctc	atataa	gggttcagga	568
catcac	cn					

<210> 5945

<211> 554

<212> DNA

<213> Homo sapiens

<400> 5945

gcattttaag	ttttaatttt	atcaaaacaa	aataatttaa	ccatataaag	aaagaaagtt	60
caacaaacaa	ccaagaagcc	aatcatttcc	ctgattgtga	acaaccaatt	gagtagtaaa	120
tcctgaacag	ttgaccgcat	atacaagaca	ttccgtcatc	ctctagtgt	ccaagtggca	180
gaggctgatg	ttttccctg	gttcctattc	ttccagtgg	gaagtaatgt	gctcaactgt	240

tcctatactt cttcagacca aattatgtat attcctacgt aagtgc aaag catggatgaa	300
aagaatcata cagggtagaa atccagcaca taagattttc taggttctga cccttatatt	360
taatgggttc tgaaaaataa ggacaataaa ttgtgcttaa atattgagaa atgtagtggt	420
tcaaaggcca aagtgccttc ctacatgaac tattctctgn ggaagaaact gaggcacag	480
ttgggnaga ccttacctaa aggatntaat aaattacact gggnaaanta gcactgggga	540
agaaggaatc ctgn	554

<210> 5946

<211> 568

<212> DNA

<213> Homo sapiens

<400> 5946

cccttggtgc caggtttatt ttacattctc ttccagaggg gatgtggggc tgggggagag	60
ccagcaggca ggcgggcagc acacagcagt ctccctgggg aatatttgag ccaggctagt	120
ggtgcctggc cccacagtgc ggggtgatat gccagggccca gggccaggac ttggcagccc	180
ctgggaagag gaggccttgg ggccagagct cttgccaggc ctagatcgct aagaaggtgc	240
tgcgtctgtc ccccgcttg ctccgcccc ccacaccag ctggaggcca gaaggcaaag	300
agggcagcca gcaagctggg gtgctgggag gaacccagc aggcgggggc ggcctttggt	360
ctctacagg ctaggaactg gttctggtta gaggaacccc gtgggggcaa anccggaaaa	420
cttggtccct tgtagagga aacgcttgga ncaggatggg ggttggggac ttggggtctg	480
gtctcaataa gggctggaaa tggcttccgt ttnaaacaaa acttttgatt ttggggaagt	540
gttcccaatt tctnggtnc tccggana	568

<210> 5947

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5947

```

aagccttcga acatctaaga tcttgtttct agcctagggg ctggctgcag aggaggctgt    60
gccaggcaca gtgacctcag aagctctttg atgacttcac agctgcagag ccaggacctg    120
tgccatcctg gaatttcaag gtctgactgg ctctgactg ccctcagcta ggatccaggg    180
ccccctttcc cttcccaact cccaaggca ccctgcctcc cacctgcca caggggtggg    240
ggggatgagc tggattgcgg tgctgggtgg aaggccccag catgtgccat tcatccagcc    300
catggtatgg aaggcttgct gagaggccct caggcaccac agctgaggag cagggttgc    360
tcccctggcc accanaggct ttctcctgcc tgacatccat gaacggnaga acaggccagg    420
gcangnggtt tccccaaang cagctgcttc antcaggtgg acacacttgt taanggctgg    480
aaactcaagg gttttgaagg gngnggaact aaaatcccat ccaattntta ttcctggcca    540
aaggcaaaac agaaaaa                                                    557

```

<210> 5948

<211> 554

<212> DNA

<213> Homo sapiens

<400> 5948

```

attgatacat cttagatgtg catattttgg gagtacatat gataattcaa cacattcata    60
taatcaaadc agcataattg ggatatttgt caccttaaatt attgatcttt tcttgatgct    120
atgagcatta ggttaatggg taaaaatgta cagttagata aaaagaataa gacctggtct    180
tcaatacatc atggtggcta tagttaacat taaccattgt acatttcaaa atgctagaag    240
agaataattc caacacgttt ttgttttgct tacttttttc tgaattctaa tagactgata    300
catcagtccc tgctgtagcg aaaataatga ctctctcaaa atgcacttca agaatgtgac    360
ctcaatggat gtaacagaaa gaacctgctc ttggtgtttg ggaaagaaaa ggtgttaggc    420
ccgccacaat tccttctcct nccangtgga ttcanagtcc tggaggacag aatccttggg    480
aacttgagtg aactcctttn accagnccag ccttgactca aattcagctc atatagctca    540
caagctccct ggcc                                                    554

```

<210> 5949

<211> 551

<212> DNA

<213> Homo sapiens

<400> 5949

```

gagatggagt cttgctctgt caccagggt ggagtgcagt ggcacatgtc ggctcactgc 60
aacctccgag tcccagggtc acgccattct cctgcctcat cctcccgagt agctggagct 120
acaggtgccc gccaccactc ctggctaatt ttttgatatt ttagtagaga cgggggtttca 180
ccatgttagt gaggatggtc tcgatctcct gacctcgtga tccgccctcc tcggcctccc 240
aaagtgctgg gattacaggc gtgagccaca gcgcccggcc taaaatattt tcaaagtaat 300
ggcaaaaact gcaattacat ttacaccaac ctaataacac aaatttattg ncttatggtt 360
ctggagggtca aaagtcagaa atgggtttca ctgggccaat caagggaggg agggaggcat 420
ggcccagtc gggagtcggc anggctgngc tcccttangg agaatccgtt ccttgntccg 480
gggttccgtc catctttaga acttacagta gaacatntnc aatctactgg nggtttcagt 540
tttacaccaa c 551

```

<210> 5950

<211> 560

<212> DNA

<213> Homo sapiens

<400> 5950

```

aagacagagt ctactctgt tgcccagggt ggagagcagt ggtgcgatct cagctcactg 60
caagcttcgc ctctgggtt cacaccattc tcctgcctca gcctcccaag gagctgggac 120
tacaggggcc cgccaccacg cccagctaatt tttttgtatt tttttttct ttttagtaga 180
gacgggggtt caccatgtta gccaggatgg tctcgatctt ctgacctcgt gatccgtccg 240
cctcagcctt ccaaagttct gggattacag acgtgagcca ccgcgcccgg ccaaagatc 300
cataaacttt gagtcaccag atagagctaa cattaccac agaggcatgt aaagaaaacg 360

```

attctagcag agtaactata atacaaaaga acaatattcc aattatgttc ctatgttcta 420
tccaggaagg ttttaagagga gcctttttaa ctggaactat attctaagaa ggtgggaaaa 480
aagttttcctt ttggttttct tattaaccgt accttgaaag ccccaaataa angttccttg 540
gttaaaagcc ctggganann 560

<210> 5951

<211> 556

<212> DNA

<213> Homo sapiens

<400> 5951

ggcaagtgtg gaaatttatt tgaaccaaca ttttactat gatgaaaatt attcttcaac 60
attgatccaa gctcccacat ttgaagggtta gggaaaatat tgcactttgc attttctagc 120
actcctcata cacggcaaaa agtttttaaaa acattctgct agttttgttt tatacaatct 180
cccaaattca tgcacacaat cattccaaac caatgttagg ttatcccaaa aaaaggga 240
aactccaaaa accataacct taaaattgca ctaaagctct gtaaagaaaa aaatataata 300
aatgtcttat acaaatttca gaacatttaa gtgcttgcca aaaagagttt attattcctc 360
atcctcattt tcattctctt gaccggagcc ttctgatctg tcaccctcca accggtcagc 420
tcggatatga ttaagtgaag ccaacatcct caacatgaaa gaagctggaa ctgnaatggg 480
gttctagggt cttncacatg agttcgtttc gagttatact tcattagcaa gttttcgggt 540
aaaaatcctt gatattt 556

<210> 5952

<211> 551

<212> DNA

<213> Homo sapiens

<400> 5952

actgggaagg ctagttgtaa acataaacat tctcactgaa ctactggccc cccaaaacct 60

aacctatctc acaatcaata atcatctttt gactataaaa tcataaaaac ttgtactctg 120
 tggctctttt gtctcgatga tttttcagag aaaaaaatta gctgtgttaa gtagtttcac 180
 tgatttatcc atcttgaata gctgccagtt ctggaacttc atacatcctc agaacgtctt 240
 catagagcaa ataattatgt aggcttctgg gaagtggcag ctgactaata taactgtcag 300
 accgtagacg ttctgatttt agactggacc gaatttccaa acgacaaaga tgggtcaggg 360
 atggaacagt ggcaatatgt tgctgtagaa tccaagcgtt tgaggcacga gcagagagca 420
 tcctttcaac agctggtgca agtgtcttcc aattagtaac tccaaagtga agataagggg 480
 gcaatgcttg ctgggtcaat ccaagaattg cccagtnnaa tcagngggtc aaatccgcaa 540
 ccnnaaatg g 551

<210> 5953

<211> 551

<212> DNA

<213> Homo sapiens

<400> 5953

ctgagacagg ctcttgetct ctcacccaag ctggagtgca gtggcacaat catacctcgc 60
 tgtagtcttg agctcctgga cacaagtgat actcttgctt tectgcctca gcttgccaag 120
 taactggaac tacaggcatg caccagcaag cctgctaatt ttaacatttt tgtggagaca 180
 aatttccaag aacgaatgca aacacacaga gttgacaaaa tgataagtag aaattttaac 240
 atgtctgaag agacaaaaag aaaggaaaaa tgcaggccta ataacacaga ttgtgattcc 300
 tttaatatct agaccttaaa ttggatatac acttcattcc taaatgtgta ataatatctt 360
 ttgtgcttct aaattatttg actaatgtca acagaaaagc accagcatat gctaattgat 420
 gagttcaatg ctgcatttat gggaaaattt cttattnccc aaatagctga aatgaatcct 480
 attcactggc tggctctgct atacgtgna aatttttaaa atgatgttga atgnaanggg 540
 aattcccggtt g 551

<210> 5954

<211> 566

<212> DNA

<213> Homo sapiens

<400> 5954

```

aaggtaagaa agtttctgct tttattgaaa atttatatat gactcagtat tgtaataaat 60
aacataaacc attttcacia aaaatgacag tgctatgcta aagaagaaaa tattaatgg 120
gggatttact tgtagtggca agacagactt tttatcaata cagaataaat attaacagca 180
ttcgtgagcc aatgttgaga cccaacaaaa tgtaggaatc aagcatgatg taagaaataa 240
ttatccagag aaaaagatgg tgtattctcg gatgataaga ctgtctttgt aaactgggtgc 300
atatcaatta gtcccatcct cacagctcac cttcaaacca cagggtttgt ttctggctat 360
gttaaaggac catcctctga ggaaagcaga ggagaggaac tccattatcc ttacagtga 420
acgcaaccac tgcagaaaaa ctccactggg aaatagaaca cagtttaata agtagattgg 480
atatgatcta actataaaat ttaggtacca gagtaagtgt acatgtggca ggcccggaaa 540
aaaatcatgg canttttctt atccct 566

```

<210> 5955

<211> 564

<212> DNA

<213> Homo sapiens

<400> 5955

```

gaacaagagt aacctatatt ttgggagttg gtgtgcaata aggctaaaac aaccaaatta 60
taaaacagta tacctgacac agtatgttga ggaaatatgc atctgtttca tagtttttgt 120
acttatgtta atgccttact aagctacaca tatgtaaata gtatgttttc ttgctaatat 180
attaaatcca atagaatcat taagttctca ttctccttg tgacttgtaa cttatcaga 240
taatttaatg atgaaagcat atgcccacac ctgcagatca tatgtactgt catctattac 300
aaccagaatt ctctcacat ttcatTTTTT ttaaaaggaa attgagaata cctgcaacat 360
cgtaaagag aatgtttag tgtgaataaa aactagaact cagtggctca tgaagtatgt 420
attattttgg caagtattt ttctcttctt aagaataaga tgaacatgtc caaatgttcc 480

```

tgngccaact tccagatccn gaagtatnca ggcttcattt cctcaatgnc ccaattagac 540
cggtctagtn aaccgaatca attt 564

<210> 5956

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5956

gagctggagt ttcactctta ttgcccaggc tggagtgcaa tggcgtgatc tctgctcact 60
gcagcctccg cctcccgggt tcaagtgatt ctctgcctc agcctcctga gtagctgcga 120
ttagaggcac ccaccaccac gcccggttag tttttttatt tttagtagag acgggatttc 180
accatgttgg tcaggctggg ctggaactcc tgacctagg caatccaccc acctcgaact 240
cccaaagtgc tgggattaca ggcattgagcc actgtgcctg gcctgctcat ttctttttaa 300
caatgaaaaa tgttccactc tctggatata ccacagttta tttttccatt cacctactga 360
aagacatctt ggttgctttc aaattttggc aattatgact gaaactctta aaaatatcca 420
tgtgtgggtt cgtttttttt gtgtgtgtgt taagttttca actcatttgg gtaaatacca 480
aggagtatca ttactggatc atatggtaag aagtccttca gntttaagag aaacttctat 540
ctggcttcca agganctgga atgaa 565

<210> 5957

<211> 562

<212> DNA

<213> Homo sapiens

<400> 5957

gacataaatt tattttttatt tcacaatcca caaaacattt caaattaaag aaatacatta 60
aaagtctcca gtttttgctt taatttcaca ttccatacac tcacaatatt taggaaatag 120
tcattttgac tgtcttataa ctgggataag ggtgcagcaa caattctgcc anatggttaa 180

atgccccaga ggatttctgc tcttctcttc ctaatttggg agctataaag cagtttttac 240
 tcccaacaca aattcttgat aaaaaccata ctctttgctg atttttcatg ttagacatta 300
 aggatgacat gcaagtaaaa aaaaaaaaaa aaaagtagcc ctgataccaa gttaatattc 360
 ccttgaaacc ttacttggct gctaaatttc tttgttgaaa accaacttat acaaattgg 420
 ttatccgggt agcttttttc cttttttctt ccattttctt cttgctccct ctttctctta 480
 ctttttccct ttggcatgnt taattagaga acattttcta taaggcntta ttaagaataa 540
 ttggccttaa ggaatgatgg an 562

<210> 5958

<211> 567

<212> DNA

<213> Homo sapiens

<400> 5958

ggtaaaccce ctccatcgte atacatttct ctgcaaatct tgtacacgga tgcctcatcc 60
 ttaggaaaat aaggctgat agtataaact ttggaggtag gagtcagtgg aggtggctga 120
 aaaaaagaga tcatttgccc catcaattgg cagcaaacgc tgtgggaaga aaaaaagga 180
 gatggattag tttggggaag gtatccattt ttttaaatgg gtgtgcactg cagattacca 240
 acttatatta actggctact gcaggcagac ctaaagaaga ggggtgtact atgctttact 300
 aatagaaata cctctttgct gggggagggg agtgcttctg aatagaaatt acccactctg 360
 agttacagct ttagtgcat attaatggg atttaaat acagtaaaaa caaaaacaaa 420
 aacaaaaaca aacctattcc aattatgaca aatctatttt tttttaaaac ctatcttaga 480
 tagaccatct tcctacgata agatggcaga acagaatgtc aggaaganaa ggttggtctg 540
 aaaaagggta tctggccang aaacctt 567

<210> 5959

<211> 546

<212> DNA

<213> Homo sapiens

<400> 5959

gagatagagt cttgctctgt tgcccaggct ggaatgcagt ggcacaatct cagctcactg 60
 caacgtccgc ctccctgggtt caagcaattt tcctgtctca gcttcccagag tagctgggac 120
 tacaggcaca cactaccatg ctcgaccaat tttttgngtg tttttggttag anacagggtt 180
 tcacatggtt ggccaggctg gttttgaact cctgacctca ggngatccgt ccacctcagc 240
 ctcccaaagt gctggattac aggcatgagc cactngcccc agccctttca cagatttttt 300
 aaactcattt agttgggttt ctntaagaag caacaaaata aatattgcaa aggaactgna 360
 tattaatatt acaagtatat gcaaatttgg agtatccagg tagtagggaa agaggataaa 420
 tactgaaaat aaacaatcca aatgtttttg ggataaagat cttggacagn ctatgaactc 480
 attcttaatc tcaagctact tggctnacc attcgtttct tggaaaacnt tggatggaac 540
 nggaac 546

<210> 5960

<211> 553

<212> DNA

<213> Homo sapiens

<400> 5960

ctcaagctgg cttttatgat tccaacttct ttctcaaag cttctttaat ctgcaaagtc 60
 tctgccaggg gtacagaaga gttcttttga ttctccaaca attgatgcag tttggtcact 120
 gtctgctgct ctttctcgta acacctttgc atactcttca gttcttctt tagattttca 180
 attgtgccat taagagattt ttccagagcc tcaacctgtt ccaatggaac atgttgtttt 240
 tgcaaaagat tttgcactgc aagtatctca gaagtctgtt tggcattttc ttctactagc 300
 ttctctttca cattctttac ttccgtgtat ttctgtgaca agtcttttaa ctgtttgttt 360
 agctcgtctg tttttctgct taatgctctt tccatttcat gagacttctc aatgagaact 420
 gncttatctc tcaaattctt ctgaagggtg aaaatctcct tctttactgg cattctcttg 480
 ctngntttct ggcttcttct tcaactggcac tatactttgg ggctgctctg anaccgggct 540
 tttagtcttc ncg 553

<210> 5961

<211> 556

<212> DNA

<213> Homo sapiens

<400> 5961

```

aggttgaatg aatgatttat atgttccatg tttatgtaag cacttaactt ctttaaaaag   60
aaactagttc tttcaaaaag agctctgaat tctgtctctg gttagaaagt gtgaacaatt  120
ctcagaactt gggacatgat ttttcttctc tctcattctt tataagcaga tgcccctttt  180
cagggcattt tcaggttgca caggcagaac taagtgagaa atacggctcc agaggccatt  240
cagtttgtct ggggtccatat gattgtagga gttgggtgtg ttagaattgg tgaacttgac  300
tttaagaaaa tctcttactt tttcttcaac ttcctttagg cctagacttg ttccaagtgt  360
ctcttctctc aataagacag tcaggactaa ggctacatct ttgaaggctg cgttttcatg  420
gtcacaatat ttgtagaaga tcaaagtnaa cctgcgggaa atgctcaaaa cgnggaccac  480
actgcattct gggccattct taaaccattt ggtcantctt gggctacccc tagtttggca  540
ggntcactgg cttgng                                                    556
    
```

<210> 5962

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5962

```

gagtcttgct ctgttaccca ggctggaatg caatggcacg ttcccggctc actgcaacct   60
ccacctccca ggttcaagcg attttcatac ctcagtcacc cgagtagctg ggattacagg  120
tgtgcgccat cacacctggc aaatttctgt atttttagca gagacgggggt ttcaccatgt  180
tggccaggct ggtctcaaac tcctgacctc aggtgacctg ctgcctcag cctcctaaag  240
tgctgggatc acaagcgtaa gccactgcgc ccggcctagg aggcttctaa taaagattct  300
    
```

atcactccta agaaggccta gagacatgat caggcctaga cctgctgatg attaccttgg 360
 tatggtgtga taatgaagtc cacactgagg atgacagagc tgagatgaag aaaatctgga 420
 tctttgcttg gctcagttga gtctctcgag tctgctctac catggggcctt ctttaagtaaa 480
 atatatacctt ttttggtaga aacagtgtct tgctntgggc caagntgaat gcntggngca 540
 aacnttngnt aattgga 557

<210> 5963

<211> 576

<212> DNA

<213> Homo sapiens

<400> 5963

gagacggagt cttcctctgt tgcccaggct ggaatgcagt gacatgatct tggctcactg 60
 caacctccac ctcccaggtt caaacgattc tcctgcctca gcctcccag tagctgggac 120
 tacaggggac tacaggtgtg tgccaccatg cccagctaata ttttttggtta ttttttagtgg 180
 agacgaggtt tcaccgtgtt ggccaggatg gtctcgatct cctgacctcg tgatccgcct 240
 gcctcagcct cccaaagtgt tgggattaca ggcatgagct gccgcacccg gccaaattct 300
 ttttaattcct tagacacagg ttagagggggg aacaatgctt aaaattccat ggaactaaga 360
 tttttttttt atttttattt ttttgagaca gagtcttgct ttgttgccca ggctggagtg 420
 cagtggcaca atctcagctc actgcaacct ctgcctcctg gggttcaaagc aattctcctg 480
 cctcagctnc caagtagctg ggactacagg caccaccac acacttaagt aatttttaac 540
 nttagtanaa acgggggttca catgttggnc nccctg 576

<210> 5964

<211> 557

<212> DNA

<213> Homo sapiens

<400> 5964

agacagaatt tcgctcttgt tgcccaggct gaagtgcagt ggcccagtct cggctcaccg 60
 caacctctac ctcccagggt caagcgattc tgctccctcg gccttccgag tagctgggat 120
 tacaggcgtg cgtcaccacg cgtggctaaa tttgtatfff tagtagacac agggtttcac 180
 catgttggtc aggctgggtc caaactcctg acctcaagt atccaccctc cttgacctat 240
 ctcagtgtg ggattacagg cgtgagccac acctggctgc cttttaactg ttctgataag 300
 caaactctac agttaaacc aatffffgtg tgcactaaaa ataccaactt cctcatcaaa 360
 atctacaaag taccatgtga aatgaaatgg catgaagaca acagtaagaa aactgtagct 420
 ataactcaga aaaagaatag ctgngatgca tacatagttg gaaaatgcat aagacaaatc 480
 tgaagagaag tngaaaatna aagaattctc ttttttttaa aanggggttn ccttttgng 540
 gccanactgg antgcaa 557

<210> 5965

<211> 576

<212> DNA

<213> Homo sapiens

<400> 5965

agatcctgtt tatttaaaat gaaaaggatt agcatgaggg atggtaacat tcctttttga 60
 tatctgtagc agcaagtttt cttatgattc attattcttc ttcttacagc tttaaactat 120
 ctaggaactt catataaaat ttaattccag tttcaactag ttgtggagca ttgatccaa 180
 aataaaatga aagtcctctc tgaagttgta gaggagactc aagaatcaga acaacctgaa 240
 gttctttaag ctgtcagttg aaggactagg taaaaaacia atatcattta gtgtgatcat 300
 taatgcacat gagtcattat tccatgtggg tgctgtcgac tggtcagggg cacttcaagc 360
 cctaactctg actttgtcct gtctctctac accctgttct actttttcag cttgttgcct 420
 gtaatatgtg aatggaaata aaataatcaa gcttgttaga attgngttca taacgacaca 480
 aaagacctga gagaatgtaa gaacctntag aacatncaaa ataagacata tttttggtgg 540
 gttaaaanct tttgggtggg tcatttcttc gggctn 576

<210> 5966

<211> 574

<212> DNA

<213> Homo sapiens

<400> 5966

```

aaattagaca aacctggcag atagcgtgag aaagaaaata tctgaattag catagccagt 60
tttagaaatt tctggttggc tgttttttaca ttaagaaatg aaaaaaaca gcaagaattg 120
actttatgcc tccctgacat cttgtgcata tgagtttggg ttctgaatgg attattggag 180
catttttaag gttgggtgtc tcaatctttt aagagtgcag agcatgagga gtggctggca 240
tccacacctg aagcaacact ttctgtgatc ccacagcttt ggatgccaaa gcagctgctc 300
agcgtgacac gaagaatcag tccagaaagc tgccacagac cctctccatg agatttttaa 360
aaaaccactt ttgttttctg agtaataaaa gaaaccccag taatattagg gacatggatg 420
ttagtacagt aattaccaca cattgaaaat attgttcagc aggaaaagta aaactttcaa 480
aaaatttctt aaagatccta ttttaataat aattttgatt aanggaccct tatgcaaact 540
tggaccaant actgaaactc cactggtggg gaaa 574

```

<210> 5967

<211> 573

<212> DNA

<213> Homo sapiens

<400> 5967

```

gagatggaat ctcgctgttg cccagggtag agtgcagtgg tgcaatcaca gttcactgca 60
gcctcgacct ccaaggtgcg agcgatcctc ccacctcagc ctcccaggta gctgggacta 120
caggcatgca ccatgatacc tggctaactt ttataaaatt tttttgtaga gatgggtctt 180
tgctatattg cccagactgg tcctgaattc ctgggctcaa gcaatcctcc caccttagcc 240
tcccagaatg ctgaaattac aggtgtgatc cactgtgccc tgcctcactg aaacttttaa 300
atcataaaat tatctgcatt ctgtatgttc cttgagcaca tagatacact ttttcatcaa 360
tggggacaca ttctactat aaggctgaga aaagagaagg gagttcaata cttactgaat 420

```

aaatgtaggc ataaacctca ctacctgttt caaaggcctc attatttcct tctctaagac 480
 aaatccngag cactttgcag ncattataga cttctnttaa acaacctgga gcctaaanat 540
 aggggtaagg ggtggacttt gattgaaaaa aac 573

<210> 5968

<211> 574

<212> DNA

<213> Homo sapiens

<400> 5968

atacatgttc atttttattt ttctctagct ctgttttata aatacatgtg ttcaaacaat 60
 cttgattagg agcattttta tcacgaagcc aacacatgtt actgcgtatc tgtttaaaat 120
 ctggtagttg cttaatggga ccaacagcag caatagctgg actcctatta taagtgtatt 180
 tggtagacatac ttctcgaatt gtctcagcat tcacagcacc aattcttgct tcaagctcag 240
 ggatgggaat cttcttatta tagcataaca ttgcctacc aatatcttca caaattggag 300
 ttgaaccatc aagctgcaac aacatgtttg ttttcagaag atttctggct cgtgcaacct 360
 cactttctgt gacacttgta cagagtcgca tccattcttt ttgaacaaca tgtagcatgt 420
 ctgcaacagt ggatgattca caaaccatat acagtcccca taatcctgna tctgngtagg 480
 aagtgttgaa agactgaaaa gctntggcaa agatggcatg acaagtganc tgggccactt 540
 gctanaaaat cattcttccc caaaagagcg atcc 574

<210> 5969

<211> 419

<212> DNA

<213> Homo sapiens

<400> 5969

aactttgcan aaagcttcat ttttactggg gggtgggggtt aagttaaaaa catttgacta 60
 tgccatgtag gcgactccaa cacttcagga atacaaagct ctgaaaagag gttatgtanc 120

aaagctcatt ttcattcaca ttgataatag gncanacaca tttttgaaga aaaaaatgga 180
 cagagcgtaa aggataacag agtacacatt ttcattttct atgatgaaaa ggaattttta 240
 aaattggctg ttgnacataa aaactttttt tttaaaccac acaacctaga attaaatgga 300
 gtaaaatgtg agaagcccc cttttttcct ccttcagcag acaaaaccgc tgncaatagc 360
 ttgatatgng nnatcacaga ctcttttcta ggggtgcacac acgcatatat gctncnnat 419

<210> 5970

<211> 457

<212> DNA

<213> Homo sapiens

<400> 5970

ggagacaagg tataactgtg ttccccaggc tagcctcaaa gccctggact caagcaattc 60
 tcctgcttca gcctaccta cagttgggat ttcaagcatg tggcactgca ctgagcccca 120
 ggaggctttc tgaaggaagt gatgacaaag gtagattttg agaataaaga aacaaggtag 180
 cgggctggac acggtggctc acgcctgnaa tctcagcact ctgggaggcc gaggcgggtg 240
 gatcacctga ggtcaggaga ccggcctgac caacaagggtg aaaccccgnc tntactaaaa 300
 atacaaaaat tagccgggtg tggcagcatg cgcctgtaat cccagctact cgggaggcta 360
 agacnggaga attgnttgaa cccgggaggc agaggttgca gtgagctgag attggcacca 420
 ctgnactgca nctggggcan caagcgagac tgtctna 457

<210> 5971

<211> 424

<212> DNA

<213> Homo sapiens

<400> 5971

gtagctcaaa gggctttgca aaattttaat atattaaaac aagaggcatc tgctagaaaa 60
 cattctattg tataaaaccc gagttcttaa aaacatgttt tctttggcac tttcattccc 120

tccctccctt ttccccagca tattgcaaaa agctctccag tgctaaggca ttggcagggt 180
 gtgtaaacag cagccagcat atgtggaaga ataatacaaa gctttttttt ttcttctaatt 240
 atgtctgtgc agcaagcata aataacagga cccattccaa ggagtgtgtg tgggttttcc 300
 ccctnccctg tgcctctgt caccttgggtg atgaggccac cagtgatgtg aagactggna 360
 gggaacccta ggtcanacct tggttncctg ttgntcttcc cnagacccan ggttccctng 420
 gttt 424

<210> 5972

<211> 574

<212> DNA

<213> Homo sapiens

<400> 5972

ccagtgtttt gcagtagaac agggttccta ccatcacctc ccttaggttt aaaaaacca 60
 aaacacaagt ctgctgtgag tccttcagca tcatgagtgt gagtgatctg agtctggaat 120
 accactgtct ctgtagcttc gggttactact gctttcactg tgattgtttt tgtacagatt 180
 cattccatta ggaggaaata tgggtgtgtat taaaaactcc tccttcgaga tgggttcatt 240
 gcttatttgt aacatctgaa aagaagtttc cctgatttcc aggatagagt tgccttctt 300
 agtgccagct tctgcatagt catcctttct tctcctcctt ttgctatatg cacaagttcc 360
 ttgagaagag cgatccattc ctatgaacat accaacacac taaagcaaga agggcaatgg 420
 taaccagggc cacagcccca ccaatgatgg cagccaangn naaatggggg ttttgnaagg 480
 tcttgctttg gctctcaatg anggtgggtg gaaggttgac anttcaaagg ggtgcaagtt 540
 taagcttnaa tccaaccggg agttcattna atag 574

<210> 5973

<211> 570

<212> DNA

<213> Homo sapiens

<400> 5973

```

gtagagatgg gatctcgcta tattgcccag actggtctct aattcttggc ctcaagtgat   60
cctcccgccct cagcctccca aagtgctggg attttaggcg tgagccactg cgcctgcctt  120
actcctactg tacttaaggc atcataacat ccagaccatc atgggccagg ctgctctgcc  180
ttacacttcc atttcattct taacatgtga cacaagatga aacacaacat acttctgaac  240
ctgcacctca gagattgcta gagctgagct tgcagattac atggatcatt ttgtgattgt  300
tgaaaaggcc tccccctcct ctgccttagg tatattctac ctttgaaggc agatttcttc  360
aggttaaaat atgatataat caggagtccc ctgttaaaaa cccaatatc tctgaaaggc  420
atactgnntt aagcttctag aaccagtata aattgattta ttcagcaact tttggactta  480
gacctggatt ctaatcctga ctttggcaat ttctaactgn aaaactgcaa taaaatatta  540
accttctgac atgaaggaat tagtaanaag                                     570

```

<210> 5974

<211> 576

<212> DNA

<213> Homo sapiens

<400> 5974

```

gtaatacttt aagtaagaaa ttgtttgaaa taagacaata agagtctaaa aataaggagt   60
cgggtgggaga gcaggagacc agagattatt acagaatcaa cctgacaata acctagacaa  120
ggaataggag gctgttcacc accaccaaga ggtccagtgc attttgcgtg ccttactgat  180
aggccatatt tcaccttctt acaacagaaa tatcatcaga gactttatca aaaactaggc  240
tgaaatccat atatacgaca ttcatagcat tttattgatc caagtccagt atttacatga  300
ctgctttgtt cattttgagg agtatatggt tataaatata tattaatat ggaattctac  360
actctaagta ataaagaagg tttctagaaa gaaaggaatg tctgcaatta gttttcctct  420
aagccaggac tattgaaaac tatgccattt tgattctctg ctcathtagg aaacagacca  480
angacggaat attttaaaag tcaataatta aangggcaat cacttatatt gccctttta  540
aatcccagaa ctggactttt caagtattaa cattag                                     576

```

<210> 5975

<211> 573

<212> DNA

<213> Homo sapiens

<400> 5975

```

gagatggagt ctcgctctgt caccagctct ggagtgcagt ggtgcgatct cagctcaccg   60
caaccttgcc tcccgggttc aagcaattct cctgcctcag cctcccgagt agctagcact  120
gtagggatgg ccactgcgcc tggctaactt ttgtattttc agtagggaag ggtgagtcag  180
catgttggcc aggctgtctt gaactcctga cctcaagtga tccactcccc ttggtctccc  240
aaagttaagg gattacaggc ctgagccact gtgcctggcc taaaattttt catttttcat  300
gtaaattaa gctaataagg gccagtttta ttctctaacc aagacctttt aagttaaatt  360
gatctttaac tacacacaca caccctgcc caagggtaca gttctacttt ctactagtag  420
taactctcct tttccacttt aattttgagg aaaattattt acacagctga cccttgaaca  480
cangnttgaa atgtgtnggg tccacttaca tatatgggat ttttttcaat aaaaattttt  540
agagattcaa ccatttggaa aaacctggcg ata                                     573

```

<210> 5976

<211> 573

<212> DNA

<213> Homo sapiens

<400> 5976

```

gagacagagt ctcactctat cgcccagggt ggagtgcact ggcacgatct cggtcactg   60
caaactccgc ctcccgggtt cagccattc tcctgcctta gcctcccgag tagctgggat  120
tacaggcacc caccaccacg cctggctgat tttttgtatt tttagtagag atggggtttc  180
accgtgttag ccaggatggt cttgatctcc tgacctcatg atccgcctgc cttggcctcc  240
caaagtgtg ggattacagg cgcaagccac cgcgcccggc ccattaatgg gcattttttt  300
taaggccact gtcctaaatc taaggaatat gaatttttat agatagtcac gatttttttc  360

```

tgcacattca atgaacagta ttaggtacct actgggttgt atactgggca ggattcaaag 420
 atagacaatt catatttccc accctcaatt agcttaaaat ctaatatataa tacccatagt 480
 naacagttaa ccaaaataca gcaatcgagc ttcaanctgt gaacatgttg caaatccaaa 540
 atcttaaggc caacctccaa taaggnggcc ana 573

<210> 5977

<211> 552

<212> DNA

<213> Homo sapiens

<400> 5977

gcacccaaat acatacattc atttatttct cattgcagca acaagataaa caagtataat 60
 tccatgggtca aggagttaca aatagtagca agcccagtaa ccttgagcat atctataagg 120
 caaataaaaac aaatatttct ttcatagnn gggcatccaa ctttagataa tctggaaaaa 180
 aatcacnta gccctgaat accatgatgt gcatgatgtg caaaatgaaa gtatcaccca 240
 aaatattttc aaagctaaaa agaaaatatt taaattcaaa tactttaacc aaattggaaa 300
 tgcaaacagt acacttagag tcatecttag ccagctgttc tccaaacaaa agatcgagaa 360
 acaaaaccaa gaaccaatgt aaaaaagaaa aggtttatct agaaaactgg aagctcatca 420
 aagtccattc ttcttctgat tctggtctcg gtcagcattt ttagaagtcc acttttgagg 480
 agcaaagcct ttaagtctag attaaccanc cggtatggaa ggctaattcn ttccacgatg 540
 acanggttct ng 552

<210> 5978

<211> 562

<212> DNA

<213> Homo sapiens

<400> 5978

atcagtaa atgcccattt aatccatcct acagtgcct gtgaaagggt cacagaaaga 60

cagttatgac tgtatgaaaa tatgattctt gatacagaat caaaagttac tttcaatttc 120
 ctttgcTTTT ataaagtcca cgataacaat acttaaatgc actttttttt tcctgngata 180
 taattaaaac ccagtgttat ttcagttgaa cttaaaatag agtccctggc ctgaatcaga 240
 ctttaaatca tactgtaaac atatatttgg tataatttat tgatcatcat ccagttgctc 300
 caaaagggtt cttctgcgct tttccaattc cccttcactc agttcgctgc cagaagtgtc 360
 ccaattacca gaatcctttc cagtcttttt cttaggcgat ttgtgttttg attctgatct 420
 ttgnctaagt tctgnctttt tcactttccc gatctttttc tttttttatc cttctctcgc 480
 tcagcatcgg atcttgaaa agcagattaa ggcctctctt cttactttct tctaagcctt 540
 tttgactttt atacttctct aa 562

<210> 5979

<211> 472

<212> DNA

<213> Homo sapiens

<400> 5979

aacgggaaaa atagtttatt gaaccgtact tntccattga agtctttaaa cataaaagct 60
 ntgtaacaaa catcacaatt tcacgtcatn tgccatataa atagaacctc cactgagatg 120
 catgttatca acaggcatgt ccccagggtg aggctcccca cccgggaccc aacttggtca 180
 gttacaaaac ggggacnaag gcgggaggaa gccagtgctc accagggtgg accgggtgcc 240
 gggcctgttg ggggtgtcctc gcagcccccc tananagggg gcgtgcggaa atggatcttc 300
 ttggctgttt ccacgtcgga cttcgcgacc aggaaccgca tcttcttccc gccatgacgg 360
 atcaggcca cagctntcag gtagccaagg cccaggaggc tgctgccatt caccttcagg 420
 atacngnccc ccagcgacag gcgcccgtng gnccgttgng ggcttncccga ga 472

<210> 5980

<211> 456

<212> DNA

<213> Homo sapiens

<400> 5980

```

gtaggtggtg ctgtattctc tggtaatacc acattcagtg cacacttagt gggttcaggc 60
actgaccatg tgttccccac tcaactgtgaa gtttcccatc aacttttttag ctaaaagggtt 120
tcatccattg atctttgcct aaatcagtta ctttgtttagc agttgcaaaa tagcaacttt 180
ataattctgt cattcctgcc actttgctag aattcctcag aatctaggaa tatgcatcaa 240
attttttagca tgcataattg attttataaa gatttgtaat attaatacaga actcctactc 300
atgtcctcaa tgatactaag acattagaat taatgggtcat ccaggagaat ggcgtgaacc 360
cgggagatgg agcttgcagt gagcccgaga taagtgcctc tggacttcaa cctgggcgat 420
agagcgagac tncatcttca aaaaaaaaaa nnnnnn 456

```

<210> 5981

<211> 517

<212> DNA

<213> Homo sapiens

<400> 5981

```

ctaaaaaaaa gtaccaggta caatTTTTTtC ctgtTTTTga tttgctttgt tttttcaagt 60
ttcagcaaat gcttgttccc ctcagcccag cccagaggat taggactgag gctgggtcag 120
agtctggagt ggggaatggg gtagtttgga accacatgac tgagtttgag gggtgcccct 180
caccacagct gaggtagggtg ggtagagatc tggccagggt agaggaggca cccagtgct 240
tggccctgac tctgccccct ggacaccttc ttcagtcagg accccaaaac aaggagacac 300
aggtaggagg agagggacaa ctggagtctg gagccctagg tgaggggttg ttaaccctg 360
tgtgtgtgca tacatgcaca ctcacacaca cataccacac aaagacaagc ttgtgcacac 420
accatacgca taacttggct ttananata ggtcanangg tangggaagt gaanggactg 480
gggttaaata aggcncittg gacggggcca accttg 517

```

<210> 5982

<211> 569

<212> DNA

<213> Homo sapiens

<400> 5982

```

caaggttcac ggggtttatt agggagtcgg gagggagaaa acccaggagt ccccaggcca 60
tccacattgc tccccggcat gtgacgatcc agcctggctt tctctgggcc tttctggaca 120
gaggctggcc aagcaggcag cagcctcaag gggagtgggt aggagctggg ggccttcttg 180
cagccctact cagaggatga tctggttggg gaagcttcgg ctcagctcct tgtgtggcag 240
aacaatcgag ttcaggatga gcacctcggc agggatccgg actcggcagc ccaggatggg 300
gatagcaggc agcagcttcc cgtccttgaa gaggctctca ctgtccatgc gggctcgggg 360
atcgttgggg ttagggtcac tgggggtacc ctccacgcgg gccacgcgc ccacggtgct 420
tccccagccc acgatgctat gcagaacaca cgtgtgctcc tgcaaagtgg cttcatggag 480
gacaatcttt tccggagccg acaccttaac cacggtaacc ccttcccaat gaaactttgg 540
gccaacacaa ccaagggggc cnttgggg 569

```

<210> 5983

<211> 566

<212> DNA

<213> Homo sapiens

<400> 5983

```

gaggcagagt cttgctctgt cgcccaaact ggagtgcaat ggcgcgatct cggtcactg 60
caagctccac ctcccggtt caggccattc tcctgcctca gcctcccag tagctgggac 120
tacaggcgtn tgccaccacg cctggctaata tttttgnat ttttagtaga nacggggttt 180
caccngtta gccaggatgg tcttgaaatc ctgacctcgt gatccacca cctnggcctt 240
ccaaagtgct gggattacag gcatgagcca cttgccagc cagttttctc tttcaacact 300
ttacatattt cacccttttc tcttcttgct tgcgtgttct gacaagaagg ctgtaattct 360
tattcgtttc ctgnataagt aagctgggtt ttttctatg gcttctttca agaatttggg 420
gttngccttt gggtttctac aagtiggaat atgatatatg taaggggtgg atttttttt 480

```

naagatggat ccaattgggg gtctctaact tactgaaccc gggnttgggn cngccttact 540
ttggnaaatt ggggccttta actttc 566

<210> 5984

<211> 586

<212> DNA

<213> Homo sapiens

<400> 5984

gtagaatact taaactttta aagaacatta atacacaaaa ttcaggaagt tcccttaaaa 60
ggacttttatt tttttctgaa ctttcccatg acgaatgtct gactgcaaag ttcttttcta 120
taacatggat ttcttcaaca ggaaagattc agtacatgac agtagttttc aaatacagtc 180
ttccatcttg tattgtcctt tcagcatctg ttctgccgcc actgcggtca gcctctatct 240
ctgggggtcag agagtcattt aagaccctga gactatctgt tgaagctgcc tgttttagcg 300
tctgttctgc ttgttcacgc cgtttcgtct caaactcaag tgcttcctgc aattttctct 360
ttgccttctt ctcccttctt agcctctttt gaactatggc tctattcttt tgttccatag 420
ccaactgctt ctcaagtgtt tccccttagt tctctttccc ttaaaaaaaaa atccatcttc 480
agctcaagtt ttttccagtt ggacctggtt ctcttgactc tggcattatc taatggcaac 540
ttttaacaag cccctggatg gtaagtcana anaagcttcg atggga 586

<210> 5985

<211> 480

<212> DNA

<213> Homo sapiens

<400> 5985

gactttacaa aaatttttat tctgtttaca caggaccttg tctcattcaa tccttccaat 60
taccaaaaga agcaggcaag acaaactggt acacccattt tatgggtag aatgatttac 120
tccaagagag atgcacttgc ctaagaccat cagctgtaga gctgggctaa tcccagtgca 180

tgactcttcc atgaattgtg tgtaaattat ttattttattg agagaggggc ttgctctgtc 240
 ccccaggctg tagtacagtg gcatgatcac agctcactgc agcctcaacc acctgggctg 300
 aagtgatcct cccacctcag ccccaacaagt aactgggact acatgcacac accaccacat 360
 ctggctaatt ttgnattcc ttttagagac cagggttttgc catgttgccc aagctggctt 420
 tgaactcctg ggctcaagtg atctgntcat cttgggcntt cnaanngctg gaatncnggc 480

<210> 5986

<211> 471

<212> DNA

<213> Homo sapiens

<400> 5986

gaggcagggt cttactttgt caccaggtt ggagtagtgg cgcgatctcg gctcactgca 60
 gcctcgacca cccaggttca agngatcccc ctacctcagg cctcaagta ccttgacta 120
 cagacaagtg ccaccacgcc tggctaattt ttgtactttt gtananacgg ggtctcacca 180
 tgttgcccag gctgggtctg aactcctgag ctcaagcaat ctgcctgcct cagcctccca 240
 aagtcctagg attataggng tgagccacct tacctggcca aaaaaaaaaa aaagccattt 300
 ttttaataaga aaaaaatctn tacctccaaa agctgggtatg atatattggg gaaaaaagtt 360
 ggctctggct cttanacctg cctccatttt ttttctttg aagaaattaa atggggtttt 420
 atgctancaa ggnccactttt ttnaanaagn ctaaattctaa aanaatggga t 471

<210> 5987

<211> 576

<212> DNA

<213> Homo sapiens

<400> 5987

aaataataat aggctttctg ccccaactaa aggaatttta ggcttctgca acaagtggag 60
 gaggcatttt gaagatggga cacaagaag tcttctttct ccagatccag aagtcaggcc 120

ttgtaagaat tcaagccaaa aaaagttcat ccatgggaaa aacggttctt ctatcatcca 180
gcacgtatatt gtgccaacag agctgaggga cttgagtaat tcaagaggct aggggttggg 240
gggcagatgt gtccagtggc tcccacagcc ccgccgtcct gaaagtcacg ccagttaatg 300
tgcctcgggg tggatcagcc ctcccagacag atgactacta ggaaattaat cccagttaa 360
taatgtgctt tggaccaagt aagtcaagat tatttttcct acaattatac aaagatatgc 420
ttttccagaa gggaacttct ggaaaaagaa caaataacac tatgcttaaa atattattca 480
catattagag aagaaaggaa ccttaaaatn gcngaagaac ctggattncn tggatcccgg 540
ggccaaccct tggacatggc tttgtgtgan aacaaa 576

<210> 5988

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5988

acaggaaaat ttaatagctt ctttttaatt cataaaacta gatacttaca ctgccatgta 60
gtcaaaaaat gcaccatcag tgacctcaga tataggcttt ttttaagattt ctagatctgg 120
aagagacttc cagtcaacag aagaccaaga aggaagatcc ctcaacaaaa agtatctcca 180
cagaattgga tctcttacag tttcattcca ataatgattt gtacttccca actgacacag 240
atcatgaggt gaaagaaagg acaaaatata tagctgtaca tcaatctgaa acagaagaaa 300
gcagcaggta ggaaaaagga atgaagaaaa tagtttttgg gtgataaacc acataatcaa 360
caaataaata acaaaaggte aactgactag tatttttaat aactaaatct accattaata 420
attaaatcta ttattttcct gctatcagnc aaaggatcat aactggacca ttttagtttt 480
cgaagttggt naacaattna attcttggaa ccacctggaa cattcctgga aaaaccaacc 540
ctggcttggt tatttttcca gcaaaatcnc cagttccttt ta 582

<210> 5989

<211> 572

<212> DNA

<213> Homo sapiens

<400> 5989

```

ganatggagt ttgtctcttg ttgcccaggc tanagtgcaa tggcactatt ttggctcact   60
gcaacctntg cctcccagggt tcaagngatt ctcatgcctc agcctcccaa gtagctggga  120
ctacaggcac ctgccgntat gcccanataa ttttttttc tgtattgtaa gtaganacag  180
ggtttcacca tgttggccat gctggctcttg aactcctgac cnttggttat ccaccagcct  240
nagcctccaa aagtgctggg attacaggcg tgagccacca cgcctggccc atggccatcc  300
tgtcacacct ttaactccat ctgcttctcc tgcttcccct gngctatttc aaatcctana  360
tatectatca ttttatctat aaatatttca gtatacagct ctaaaggatt taaagatncn  420
taagagtnc aatcattac tacnctttaa aaaaatctca ataaattcct taatatcaaa  480
catatgggta gnggtcacia tttcaatttt ccataaatng gggttttttt tacatttggg  540
ttaaatangg tcccaactgg ttgggacngg tn                                     572

```

<210> 5990

<211> 547

<212> DNA

<213> Homo sapiens

<400> 5990

```

aataaataga gacagggtct caccatgctg accaggetca actccaactc ccgggctcac   60
acaatccttc caccttggcc tcccaaagng ctgggaccac aggagtgagc caccacgcta  120
ggccaaatag tagtttctta aaggacagat aacattttgg aatctgaaac cacatcaatc  180
cactttttta ctgntaaaat ccattgctat gtctggaatt ttcaaaggat cttttgcctt  240
tgcttgattt tgcaacatca tgcatgggtc atttgcaaag cctagattta ctgagttatg  300
cccattcttc aaataacata tticattaaa caacatttta aaatattgca gtccttaacc  360
actgatatca taaggaaagt cttttaagta ctaggaagct gcaaactcca gctggcaact  420
ttttaaaaat tctaattttc acccaaattt tatcactggn aataaatact ggcagtgggt  480
tcctaaaagn gcaagctcct tnatttcaag aaaatntgcc aatctaaggg gnaaanccta  540

```

nctggta

547

<210> 5991

<211> 604

<212> DNA

<213> Homo sapiens

<400> 5991

```

acaatgcaat tatttat tttt acaaggagat tctatacatc agggaggcat cttgaagtac 60
aatacaccag gctttcattt cttctttaca ttatgattgt gagtttccat ataagttggt 120
acttacatgg aaagggaaca caaaatccat ttttatatac ataaaaacaa aacacccaaa 180
gagacttgac ccccaaaatg tcttgtttca cttgaaaata acatgaatga gacgaaagat 240
gaaccagatt acttggtgac gcacagaagg cgaacaagta gctcaggaaa tcaaatcctg 300
tttcaagctt ggacacattaa gggtaagaaa ggtagtgaaa gaagggttcg aaaatatcat 360
ctcaagccac aaaaaatctg gcagaagaca gcctccaaat caataagata gaatggtttag 420
aagtcaagtt agaagttatt gngtggctac cttatatcca gacctctaag agactgagtg 480
gaattgncac ttctcttncc tcagntattc caaatggtag taaacttcaa ggagcttggg 540
cttgatgact cacacctgnt ntttnaaact tttggaggcg aaaatggcna attccttgaa 600
nccc 604

```

<210> 5992

<211> 592

<212> DNA

<213> Homo sapiens

<400> 5992

```

aatgattgaa canaatttat tggctgtctt tgagtgtctt tggatatggct ttggcagggc 60
tgtctgggtt cctccgcttt gcttgttttt gggctgctgc tgcagccttt aaggctcttc 120
ttcgcttctt cagcttttga gtctcctgga aaacccgaat gcacagagcc ttcttggtca 180

```

cgaatcggcg gtgggctctt cggtaataca gaggggggaa ggtgtactca attcccagcc 240
 cccagcatat cttctcaaag acatcatant tgggtgttacg gaggtttttg agcatctttt 300
 tcctctggtc aatgctcatt agcagatagc cgtttgtggg ctttgnccct tcgatgtttc 360
 tccaagtgtt cttcataact gcggatcttg acagacaagg caataactga aaccacaaac 420
 cacagaggat gatagttggg cacagangaa ggaaggccca gcctggttta cgttttaaga 480
 actcaaggaa taacatcacc aatgctctgt caacttntta taaatnccaa tcactctgaa 540
 attcaagaat tcaaagctta tcttaaacad taccttcctt taaaagcaaa aa 592

<210> 5993

<211> 594

<212> DNA

<213> Homo sapiens

<400> 5993

cttatttttaa ttgtttgaaa tttttctaga gccaaagcag ctcttttaaag aagttgtttc 60
 ttccaaagaa caaagccagg ttaatgacat tcaattctaa atgatacatt ggaattgtgc 120
 cttttctacc aactggatt aaataaactt gtcaaaatat ggttttgtca ttttctgaga 180
 cacttggtaa ttgtctgttc tttctttcat gtgcccgtta gtacatttgg ccgactgacc 240
 acctgtaaca gggaggtctc atgtttgtta gtagatacgc aggtaaggaa acttgaattc 300
 atcctctcct cggtcagggt ctttgctttt cttttaatat atgcatataa aatagtaggc 360
 atttgattct gcaaaggcac tagactactt gaattaaaca ttctgtccag agggataata 420
 ccaggctttc cttttcctca tctgtagtaa agtttcangt ccttgacaga aatagctggg 480
 actattccaa atttgcttca ggcattccaa tggtgacaaa gggaancgaa gtcattgaaac 540
 tctgttcctc ctatttccat caaggggggc tctctactat ctttangaag gang 594

<210> 5994

<211> 589

<212> DNA

<213> Homo sapiens

<400> 5994

```

gatcttttta aaaacaattt atttttttcc aatgtaagaa taacaagttt aatattgaaa 60
atctgaaaaa ggcaggaaga taggaagaag aaaaatatca accatagtcc taccacctaa 120
agaacactca ctgacagtgt ggccatgctc attctttaag ccttaattta ggtcccattt 180
ctgggtgtgt gccttccttg aacttcctcc cccagatctt ccatgtcata tctgtaccac 240
tcagttgtac atatcatata cttttgtgta taatgtgatg tatgtcttat gtttccaacg 300
agattgttac atcttcgaag gctgcaaaca tgagttgtac ttgttagctt accccaaaat 360
aatacctggt ataccggacc caatatctgc tgattgatct aacctaaatg aatacaaacc 420
atttcagaaa aagatatata atagaccaca tatccaggtc atgaaaatta agctttcang 480
tcacctactt agtgactatt gctcttgacc ctagactctt ggaaggccat tnaactggcc 540
ttttttcaca ccaaactggt aaaaggggac tggnttganc cggatttcc 589

```

<210> 5995

<211> 342

<212> DNA

<213> Homo sapiens

<400> 5995

```

ctgagatgta gttncactct gtcgcccagg ctggagtga gtggcncaat cttggctcac 60
tgccgcctcc gtctnctggg ttcaagtgt tctcctgctg agtagttggg attacagtca 120
tgcaaccacca cacctggctt atttttgtat ttttagtana aacagggtnt cactatgtta 180
gccaggctgg tcttaaactc ctgacctcaa atgatatgcc tgccttggac tcccaaagt 240
ctgggattac nggcntnaac cactatgacc agcccggaca ttaactcaca atggcngggt 300
tattgncctt cctctatgcn aacaattccc accagcntca ca 342

```

<210> 5996

<211> 577

<212> DNA

<213> Homo sapiens

<400> 5996

```
cttctttaat atctagcaat aactgagggt caggtgttc atccacagct ggaagtccag 60
ttattatttc tagtaaaacc acaccaaagc tgtaaataac agatttgggt gttatttctc 120
cacgcaaagc ttctgggtgcc atataagctg ttgttccac aattctgcta gtcattgactg 180
tctgggcaaa cttctcanaa gcccgtgcaa ggccaaagnc agatatttta gcantaaaag 240
cttcatccag taagatattt gcncttttaa tatctctatg aatatgatga ttttcatgta 300
gaaaattgat gccattagct gcaccctgag caatcttgca tctcatgtgc caagaaagtg 360
gtggagtacc atccaagcaa gagagtctgt ctagcantga accgttaggc atgtaaacad 420
atactaagca gaggtcatct ccatcacttg agaaaccaag tagttctact aagttttcat 480
gttgacactt tgccattact ttattcttg atcaaactng ctggttcaag tctttagtag 540
nantgncaac ccattgggtg caagcttntt actggnc 577
```

<210> 5997

<211> 599

<212> DNA

<213> Homo sapiens

<400> 5997

```
gagttatata tgtatatatt ccgtgttcgc ttgtacagga ggatttacat ggctgtataa 60
agatggctag gggcgccgcg ctcttctggg gcgctcacgg tgacaggctg gggttaaaac 120
tggctgcccc aggagaagcg gaggcctgga attaaatacg tttcggcgca ctggatttaa 180
ataagtttcc tgaatataca aagggtggggg ccacgagttt gctgccagtc atcgaggaaa 240
catttagctt tccaaaaata tgctgggttc gataaataga ttttagcctc tctgctatag 300
tttttttttc ttttaatttt agaaataagt ttatatgtgt gatctgtttt caggtgggtac 360
agggaggaggaa ggaagggcaa ggcagtagct ctcagctctg cactgtccta gtcaggctct 420
ttgcggaggg ggcagcaggg cccacgtgt cgtggagttt gcgcacatgt ttctttaaag 480
tcaaaatttc ttgcaaaacc cttttgccgc aagttggcgc gtnaaaatat agtgagccgt 540
```

tnaacacctt tgccggacaa ccttgcaagt nnaanttttt nggcttggca ttttncgga 599

<210> 5998

<211> 543

<212> DNA

<213> Homo sapiens

<400> 5998

ctttgacgga gtcttgcttt gtgcccagg ctggagtgca gggatcatgat cttagctcac 60
 tagnaacttcc gcctcccggg ttcaagtgat tctcctgcct naggctccca agtagctggg 120
 attacagggtg cccgccaccg cacctggcta atttttgtat ttttagtaga gaaagggttt 180
 caccatcttg gccagggttg tctcaaactc ctgacctcgt gaccaccca ccttggcctc 240
 ccaaagngct ggcaactgct tgattttaat gaacaaaatg taagtctaca tcaacttcct 300
 gggatcagttc actaagccat tcattcgagg tccacatcat gcctctataa atcccttcct 360
 tacctagggt tatttctgag ttggaaaaag caaacanacc cactgctctc tcctcttggt 420
 ccaagaagca nanttaaaaa gttgcactct gccttgaagc ttnaatgtta aaggaaattn 480
 ggtcttanaa ggttatcct ctttataaca tccattaag tgnccctngg gggagttaan 540
 tnc 543

<210> 5999

<211> 279

<212> DNA

<213> Homo sapiens

<400> 5999

ctgcagtttg aatttatatt ttattatatt gaaatacaaa aatttaaaaa catttcaaaa 60
 tacaccagta catgtttgtt gtaaaaattt cacctaggag gatataaaat agaaaagccg 120
 aatattcctt ctaactctcc cctctacctc aattcccttc agaggtaaca cagcaaaaaa 180
 aaaactgggg aaaagcaaac aactttccag acctctacta ttctaaaaca caaagagcat 240

tacagcttgc tatgcatttt tttttttggg ggnnnnnnn

279

<210> 6000

<211> 548

<212> DNA

<213> Homo sapiens

<400> 6000

ggagacgaag tctcgctttg tcacccaggc tggagtgcag cggcatgac tcggctcact 60
 gtaacctcca cctcctgggt tcaagcaatt ctctgcctc aacctcctga gtagctggga 120
 ttacaggcat gcaccacat gccagattt ttctgcatta ttattattat tattatttgt 180
 ttttagtaga gacgggggtt caccatgttg tccaggctgg tttcgaactc ctgacttcaa 240
 gtgatctgcc tgtctcagcc tcccaaagtg ctgagattac aggcatgagc caccatgcct 300
 ggccacaaac atttatttac tatittgagt atatgtttta agcatccaag cacattttat 360
 ccaattttta agatatatta tccatgcttt aaaacttttg gaaaatattt taactcagag 420
 atgtctacat tctctggatt ttcatatta attcaatag atgtacagta aaggaattta 480
 atggatcacc tatattcatt ttctgcttg ggctttaagg nacaagaca tttcggagtt 540
 naaccggg 548

<210> 6001

<211> 536

<212> DNA

<213> Homo sapiens

<400> 6001

atttaccaat gtcattgatt ctgaacaaag gcaaaaaata caaatccta ccattaaact 60
 ggcttggttg ttgtttgggt tggagtagct gtgggggctt ggggaagggt gtcgtttcct 120
 tctagtagtc tcatgtcgtt ttaggtcagc tgggctggct tacacgcgct gtgcggtcct 180
 catggagatg ggagctctgt gtgtcagcac aggaagtggc ctcccagcgt tcagcctgaa 240

gcagcccaag tcctgtaggt gcttgccgtc tctgaagccc caggaacatc agtgcaagaa 300
 ggaagagact gctggcaaag atgactccca aggctgttct ccgctctggt gggacaacct 360
 ggggtgctggc cccaaggggc tcctccagag agatgtgtgt gacctgcagg tgtaagtggc 420
 acctgcagag ccaggttctg cgtgaaagaa gangagatct gaagtgcctg ccacctttgc 480
 ctgagctgga aaagagccca aaacttggct ggggatccac cacttctttt ggtccn 536

<210> 6002

<211> 552

<212> DNA

<213> Homo sapiens

<400> 6002

cagttcattg caatttattt aatttaaaaa taaaaacaga aacaaaaacc aaaatgaaac 60
 aaaaatcagt ttccaacgaa aatacaaaaca ctttgggtgg ttatccagct tgtctttccc 120
 ctgtaggctg ttctgggctc aaaccaatca aatgagtga aaccaatttt gacaggagcc 180
 ataaagcatg ttgcaccaat taaattacac caatatatta ttataatacc tttgaaatgc 240
 ctttcagacc aataaataaa aaagacaaat tcaaataaaa aagtcaactt tttattacca 300
 aaaaaaatag aaattaaata aaagtcacaa tgtggatttt tttttttttt taatgtgcag 360
 tcaagtttct ctcttttttt cttctaggaa tgataccatg ccagtaaadc cctacagaac 420
 atttccagtt tggcaacaag cagtcagtcg atcattcaca tttgtactca agacagcagg 480
 cctgggcaaa actcgcctga atttcacctt gaaaagtgt ccccatcatc tgaagaaaca 540
 ncacctgta an 552

<210> 6003

<211> 554

<212> DNA

<213> Homo sapiens

<400> 6003

aaaggtatTT ggctctcttg cccttctgcc ttctgccatg tgaggacaca gtattcctcc 60
ccaccatgag gggagccatc ttggaagcag agagtggcct tcacaggcaa cctctctgat 120
cttggacttg ccagcctcca gaactgtgag aaataaattt ctgttcttta caaattatgt 180
atttcagata ttttgttata gccacacaga caaattaaga caagcaattt cttgtgccaa 240
gcattgaact aggatttggc actgaataag caaaatcctt gctatgacaa agccatcagt 300
ctagtggag aaacaaaaga caactgaagt aatcgaataa gcattacatg ttgtgtgata 360
acaaggacta ttgaaaaaaa tatggcaggg taagagatta tagcatttgg gagtgttgat 420
gggggtatgt tctgagtgtg acagagaatc acagagaggt ctaaataaac ctggggangg 480
aatgaagact tntgagaaga gaaaacactt gagcataagt gggatagtcc aaataatnta 540
aggatgggga gata 554

<210> 6004

<211> 546

<212> DNA

<213> Homo sapiens

<400> 6004

attagaaagt ttattgcatt aatctataaa ctcatTTggT gatataaatg acaatgtagg 60
ctaagaacga tgaaagtTTa tcatctTTtg aaaatagaga tatttcaaca ctgaaagcat 120
TTTTgtTTg ttTgccacaa ccaagtaaac cctaattgat ttTgattTTT cTTTTaaaa 180
atatagattg caattcggtc atatcaaaat gaagcctaga ccaaatactg aactagcata 240
agcagaccca gtgttaggac atcaatatta acaggactct aaacgggcag ttTctgtac 300
atctTTtagtt aataaacaag caaacatcca taccacgtaa tTcacactTg catatgcatg 360
tacactTTca tgatgtgaag cTTttaagac caaaatctct cTTaaacatt cagcttgaat 420
aataaagaca TgtTgcctag agatagaaaa tTcattattt Taaaaaatat aacctTaaaa 480
ctTgaattTT tatgantTTa tTTtaagcT aaagnngnct actaatattg gccccattTT 540
taaggg 546

<210> 6005

<211> 544

<212> DNA

<213> Homo sapiens

<400> 6005

```

aacaatattt gtaccgtttt tatttgtaaa aataaccatc tgaatgcatt tccatagtat 60
attacagtta agtacttcat tacgttatta gagcattcag tagttgcaa agtattaaac 120
tgtgcttgag aagattcaga ttgtttcaaa gtcattcact gaactaaaag tcattttccc 180
catttttaca gtcatgacat ttaccagagt cattcaactc caattttacat aagaaaacat 240
tatagacaaa atcccactga aatcatcaaa caatatttta tgctgttaca aatatgttat 300
gcaaaatata aactggcac cagatttgta tcatcgtgct ttacaaagat atattgcaca 360
tgctagagca taaaatatgt agacaaaact accaaataaa agatatttgc attgaatttt 420
tagatcacat aagaaacgca tagaattaca tttatacaa cactcagatt ggcctatctt 480
aaaatgcttt tncctataa tactggccta agggttaag gttcgttaagg acgaagcctt 540
tntc 544

```

<210> 6006

<211> 545

<212> DNA

<213> Homo sapiens

<400> 6006

```

gcaagaaatt attgtctctc tatctcatat atagttcact ctttgtagta caaagtgtta 60
aaatgtcaaa caaaaataaa tatcaatgtt acagtagcta gaatattcaa taaaatagat 120
ccctgccatt cttgattgaa atgttcagtg agacttaatt tcatttggat attattttcc 180
agagatttgc gaagtctcat gttcctgtta ttgcagctca tttctagggg gtggtaaaga 240
tggggtagtc tctcttccca gacaaaatgc tgggagagag tgggatgagt ctgggggtgg 300
ggtggatctg aaatgccagt atagtcacga gatcttcagg atgtgtattc cttcattacc 360
aggtagcaga gctgtagtgt ttattgggcc taactgtggc atcagaacac tccccatctg 420

```

aagagtcaca gtccgattct tcaaactgca tggggttctc atagccacgt tccttcacac 480
acagcttgcc cagagacatc tgagtcttna caccgggcac cggacacttc ntggcaaaaa 540
nnccc 545

<210> 6007

<211> 537

<212> DNA

<213> Homo sapiens

<400> 6007

gactggtgcc aaatgttcac agcagcttta ttggttaaca caacaacaac aacaacaaca 60
aaactagaaa caacccaaat atccatctac aggcaaatgg ataaacagtc tngngtatat 120
acatacaatg gaatactgtt gagcaataaa aaggcataaa ctattgaaac atgcaaaaaa 180
tgataaaatc tcaagataat tatgttgatg gaaagaatcc agaccaaaaa aagagtacat 240
attatatggc tccatttata taaaattcta gaaaatgcaa actaatctac agagacagaa 300
agaagatcag cagttcctta gaacggagaa tgtaggtagg ggcacaagag agggattgca 360
acgtgatttc tccaaggggt gatggatgtt tattatcttg atagtgggtga tggtttctcg 420
agtacacatg tncataaaaa cttataatat tggatacatt aagtgnntag tttactggat 480
gtaaattccc atcaacaaag gtnttaaaaa tggaaaatna aacaaatcag aagctgt 537

<210> 6008

<211> 546

<212> DNA

<213> Homo sapiens

<400> 6008

aattcagttc caggaaccct cccacaaggg tgtttaaaaa ttcctgtgc ccagagtaac 60
ctaccgctct actgggaaga gcacactgaa atgtaaaaca caggagccag acctttccag 120
ggaatggagg caacaccaag gaaggccttg gaagaggtgt tggctgtctc agcagccacg 180

ccctccgctt ccttcgagcc agagcctctg tttcatttgg ctcttttgcc cttgcctcat 240
 gtgactcagt ggctgctgtg gtctgaatgt ttgtcttccc tccaaaattc ctatgttgaa 300
 atccttacct tcaaggtggt ggtattagga ggtggggctt tggggaggta attaggtcat 360
 gaggatggaa ccatcaggaa tgggattagt gccctctaag gcactaagaa aaggctggtg 420
 ggctagactc agtgactcat gcctgtaagc ccaacacttt gggangcttn agtggaagga 480
 tcatttgang ctnggagttt gagaccnanc tggacacctt aaaaggaccc taatnttttc 540
 caaaaa 546

<210> 6009

<211> 500

<212> DNA

<213> Homo sapiens

<400> 6009

gagacggagt ctcgctctgt tgcccaggct ggagtgcagt ggcatgatct cggctcactg 60
 caagctccgc ctcccgggct cagccattc tctgcctca gcctcccag tagctgggac 120
 tacaggtgac cgccaccaca cctggctaata tgttttttg tatttntagt anagacgggg 180
 tttcacctg ttaaccanga tggctcctaat ctctgaact tgtgatccac ctgcctcggc 240
 ctcccgaagt gctgggatta cagcctgatt tttctaaaat tgaacccaag agttagaaca 300
 aaacaggatg gaatctanaa ggcagactgc gactgntcta agaaatctcg tgtagaagca 360
 gggatnacag gcatgtgcca gtctccctna aaactgggcc cacttgaggg aaactcattt 420
 ntcagcatgn ggggctttat taattaacct tnttgaaac tgactgggcc agangagaca 480
 caccctntga aacnggagca 500

<210> 6010

<211> 312

<212> DNA

<213> Homo sapiens

<400> 6010

```

attttcaaaa acaactttat tcatgacaca tattaataaaa aaattccac ccctggaaat 60
gagctaaaaa aataaacaaa atccacctcc cacctccctg tccccacttc ctcccattcc 120
ctccaaataa aagggaaaaa aggcaaagga aaaaaaaaaa acaaaaaaac aaaacaactg 180
aaaaacaaaa acacccttaa acccccacaa acaaggnagn gcatttcccc agggggaagg 240
ggaatttaca ctggagccgn tgggagcgga acgganatnt tccggtaca gaaacctgca 300
aagaaagacn ct 312

```

<210> 6011

<211> 531

<212> DNA

<213> Homo sapiens

<400> 6011

```

gagacagggt cttgctctgt caccagata gagtgcagtg gtgggatcac ggctcactgt 60
agcctccacc tcccaggctc aagtgatect ttcacttcag cctccctagt agctgggacc 120
acaggcatgt gccaccatgc ctggctattt tttttttttt ttggtanana cagagtctca 180
ctatgtcact atgttgccca ggctggcctc caaccctgg ggctcaagca atcctccac 240
ctcagtctcc caaagngtg ggattacagg tgtgagccaa catgcctggc ctgtttctgt 300
ctttactgnc cacatagcca taccttcac atcatataca gaaagnggca aatcataatt 360
aacgggagag taataagtat tttggggaaa aacaggaat agagaacctg gaacattatc 420
ttccaacaga gaatatccac atgaaaatta aaggaaatat agctatatgc atgagttcta 480
tcttcttana ncttntagna tccctaacat tancctcctg nttggtggn a 531

```

<210> 6012

<211> 555

<212> DNA

<213> Homo sapiens

<400> 6012

```

cttagaaagt gagaatttgt aatttcttta ttaaacatta cattcagtggt aaaggcttta 60
accatcataa tcaccatgat ataatatgtg agtatgtata tgtaaaaaaa taccattga 120
acataaaatt atgttttgaa atctatgcaa catgaaatat agtttgatat aaaaaacca 180
actaatcaga aacatgaaaa ccagtatggt ttaataaaag cctgttgctg gttctggaat 240
aactgtggca tgcattgtcc tagtcatgtt ggacttctcc ttcagctttg attggagtag 300
tgtgtgttcc acaatgccaa ttctaattgc catctctaca gtttcttgct tcagttttgt 360
taagctctgt ttaattctca ccaaggagc accatcagtc atgctgctgc cttttcttc 420
catttcttgn ttacctttt ctaattcttc cataacctca gagaggagtc tggttctttc 480
cgcaactctc catttncctg ntgggnatcg ntccttgcc tacttanctt ggcttgactg 540
ccnaattct tgacc 555

```

<210> 6013

<211> 555

<212> DNA

<213> Homo sapiens

<400> 6013

```

gagatgaagt ctccctgtgt tgcccaggct ggagtgcagt ggcccaatct cagctctctg 60
caacctccgc ctccctgggt caagccattc tctgcctca gcctcctgag tagctgggat 120
tacaggtgcc tgacaccacg cccgtctgat tttgtatgt ttcgtagaga cagggtctca 180
caatgttggc caggctggtc ttgaactcct gacctcaggt catccaccg cctcggcctc 240
ccaaagtgtc gggattacag gcgtgagcca ccgcgcctgg ccttgcatgc catttaact 300
ctctcaatct cacacctgt cccagtctca cactttctgt gtctcacggg ggcatgcaat 360
taccaatac aacctgtcaa gtacacactg ttttatagta tttcatagta acaccagtc 420
gcctgtccag cgacaacat ggaaggtcac atacattctc tacaagtctn ctggtgtcac 480
acgcatctga cacattccct tcatacaca gtctgtccct gtacacaaac gcacgaacc 540
atttctgggg naaan 555

```

<210> 6014

<211> 543

<212> DNA

<213> Homo sapiens

<400> 6014

```

gagacagcgt ctcaccttgt catctaggct ggagtgcagt ggctccatca tagcctcctg   60
cagccttgat gactgtgcta gagccaccct ctcacttttag cctcctgagt agctgggact  120
acagggtgctt cccactgtgc ctggccaatt aacaatttca tttttatttt tagtagagat  180
gagatctcac tatgttgccc aggctgggcc tgaactcctg agctcaagag atcctccccc  240
cttggcctcc caaagtactg ggattacaaa caagagccac tgtgcctgac caggctctaa  300
gattgctaata ctggctatag aaggactaat gttggccacc tcagagacat tcattcattt  360
taagaaacat catctttcac tgaatataat atgacatttt ttagaaggca cagcatatat  420
gtaccataaaa gagccatctc aactctgaca taaactttgn tatcatacag catgnntatt  480
ttatgcgaat gaaagaactc ttttagatgg tttagacncc aatntntcat atnaccacct  540
ggn                                                                    543

```

<210> 6015

<211> 530

<212> DNA

<213> Homo sapiens

<400> 6015

```

gagacggagt tttgctctta ttgcccaggc tggagtgcaa tggcacaatc tcagctcact   60
gcaatctcca tctcccgggt tcaagcgatt ctcctgcctc agcctcccaa gtagctggga  120
ttacaggcat gtgccaccac gcctgactaa ttttttgtat ctttagtaga aacgggggtt  180
caccatgttg gccagtctgg tctcgaactc ctgacctcat aatccgcccg cctcggcctc  240
ccaaagtgct gggattacag gtgtgagcca ccacgcctgg cccctgattt taagcaatac  300
ccagcttact tggatttttg ggtgaagtca gtgctgagtc tcccaactct gttggcactc  360

```


caggggtggg acagacactg tccctgggtg cagaggccct ggaggcagca ctgccctttc 420
 ccccaaaggc caggctctga ccttgagagt ggtgggagtg ggtgatcctt ctggganggt 480
 ggacttccaa gaacntggc tgtnngggaa ccttgantgg gaanaccann 530

<210> 6016

<211> 560

<212> DNA

<213> Homo sapiens

<400> 6016

agcgtcaagc acagcaacct tttattaact gttttcagac acagataaga aacattgcat 60
 atattgcata actgagcact ctcaacgagt tgaaattaca cccgtttcac tgatggagaa 120
 actgctcaca gagaggcagt tttaaaccaa gatttaattct ctacattcta aagagaaaat 180
 caaatttacc atcaagcatt acaaatgagt ataatgagtt tcttccatga actccgcaga 240
 aacacaagca attgcattgc aatctgacat tccactcacc cctgcttttc cgatattggt 300
 gaaggcaaaa acatcctttg tcttggaagt tcaccattca attttagcca tctgcagcta 360
 cttaaattta aaataattaa aatctaaaaa taaaaattca gttcttcaat ttcactaccc 420
 atattcaagt gctcaacagt cacatatgac taatgnctat tggattggtc agcttggcta 480
 tagggatata ttcattcattt ccaaaagggt taatggacaa gcattgggna aaaatccttt 540
 gccccaaatt nttgnnggnt 560

<210> 6017

<211> 557

<212> DNA

<213> Homo sapiens

<400> 6017

ggtctactga agaaatccta ctttgtgata tctcatgtt aatatcagca tactctttct 60
 gagcaaataa ctctagtgc aagcacagta cctggaagta tcagaattaa ccagtaatgc 120

caataatgca taagaattgt taatgagtaa ataaaagctg attatactat atttattttt 180
tagtcagaat ctctcacatc aaggatcaca atccacttcc aagcaatggg taaaaggggtg 240
acagttatct tctgaagatt cagatgcttt aacttttggg ggaaaagtat taccatcatat 300
gcttcttata aagggtctaaa atgtaaaaac gcatatacag aacttaaccc ttaactagaa 360
agaaattatt attaatggag tgtcattcct aaaaattaca caatacatcc aactaaagg 420
ctgagaataa taattctgaa ggttttaacg actattctct tattctgaga ctcttttttg 480
ggnttttagt ggagacaggg tttcacccgn gttggncagc tgggtttgna ccccnacct 540
canggggaac cncctccc 557

<210> 6018

<211> 541

<212> DNA

<213> Homo sapiens

<400> 6018

ggtagagaca gagtttcacc atgttggcca ggttgggtctc aaactcctga cctcaagtga 60
tctggctgcc ttggcctccc aaagtactgg gattacaggc atgagccacc atgccagacc 120
aaggagtcag aattcttaaa tggcttactc agttgtatat atagttgagg gcagaaataa 180
atttattaat gaaatctatg acaaaaacaa accaatatcc agaagactat gggccaccac 240
cacacattag tcctacttac aggagctggc cttcaaactat tatacaatag ctttcttcaa 300
aatcaaataa aagatttgta ggcaaaaaca taccaggtat tctgaaataa tatatgtaat 360
gcctacttca ctatgggata tgtgagtcca tcaataactg tcagtttccct ccctagttta 420
tccatatatc ccctaaatgc atgcccctgt tatgtcaaaa caattttttg agttgccaaa 480
attttttaca tgccaaattt cccaaacngg gcntttntta aanattgcct tggggggaaa 540
a 541

<210> 6019

<211> 530

<212> DNA

<213> Homo sapiens

<400> 6019

```
acattcatat gaagtctttt tattgatctt ctttgcaat ttcacaagaa taaagttgag 60
ataacttaca aaaacaagca ggattgcaat caaattgctc aatattaagg ggccacgtct 120
agcatctgga cttgcttcat tagttctggg atgataactt ggtgtcaata aaaggtgtag 180
agtgggaagag tgtggctatt gatctgtggg tctttaaaaa ttaatgttcc tattacacag 240
ggtctggggg tgagtgagga caaaaggagg gaaaaggaag agctaaggga tgatgagaaa 300
ctcatattag cttcttagaa ttaatttggt tttcaggcaa tccagacctt ctttgcaatc 360
atgagtatit taactcatga gtatttaatt ccttaaaaat acaaactccc caaaaccag 420
gtcagctcta aacctaggga tgagcattta cttggggaca gcatgcccac tttggtgaagc 480
acagaagctt ttcaccctgg ttttccannt nctggtcnna aancccgcc 530
```

<210> 6020

<211> 507

<212> DNA

<213> Homo sapiens

<400> 6020

```
gttggcaaag actgcacatg ctggaaggta tttccaatag gagcccctgg ggcaccttca 60
atattgggct ttgaaaaaga tgggtggcatg cctgtttgac caagagggtg ctgtacgcca 120
tggaagggct gtgggaatga agactggctt gacagtggta ctggagctga aggctgttgc 180
tgcagcattt gtgactgggg gtcacccaac gggttcatga ttggtgatgt gatgggaaca 240
ggaggcatga agttttcagg catcttcttc tttttgggta ctctgttcaa agctggaggg 300
tcattccaac cattctgagg acctgttctt tgggacgcag gcagctcact ggcagcaggc 360
agtgtacctg ttgttccagg aggcagtgca taagctgaag atgatggtgg agctcctggt 420
cccgccatgc tggaaggatg ctncagagga aagggggang aaggaaagaa ntancaggct 480
ggangtangt gaaaangcct ggtgctg 507
```

<210> 6021

<211> 546

<212> DNA

<213> Homo sapiens

<400> 6021

```

agagaattga tgcatttgag aaaagatgaa gcagatagat atataattgt tcacagtggg    60
aaattatagg tggttttctc atatatttatg tcagtttctt gtatatcaaa aaatacattc   120
atattatgag acacaggaat ctttacatcc aaaataattt gatacagatg ccttaacatt   180
gctgaatgag acaactttgg aaagattcctt gttttgtgat tcctttttac cctctaagca   240
cagtgccttg ttaacactgt gtgtgtagta aatgtgtgtg ctgcttaagg taaagaattt   300
ctagtaaact aaatgcccaa ggtgactgcg tgattccatg ccagacagga aaaagcagtc   360
atgctttttg cccctagctg aacgtttggtt ttccccacaa actatgtatt catccacaga   420
atagtgaat atgctagatc ctagtacaag acaagaattc aatctaaaaa atctctagat   480
ngataattaa aatattgcta ggtttggtat tcacaaaact ggagatcctg atggatantt   540
tcctcn                                           546
    
```

<210> 6022

<211> 548

<212> DNA

<213> Homo sapiens

<400> 6022

```

gaatttaaga ctttacttta ttcagcaaaa tcatttattt acacaatggg gaatgctggg    60
ttgatattgt caatgaaata aaaacaaaat gaacagagac aatactgaac tgtatatata   120
ctttgtatca gagttgacca actgtttcct tacctgtatc aggaacatca agagcgacag   180
tatcacaagg aacttggttt aacaatacac cacataggtc cagtaatacc ctgggaattt   240
cccaatgcaa tcaccaactt tttctttttt tataaatata taaaaaaaca aaaagtcagc   300
aaaaccagca ttatgatgta gcaagcagag tataactctg aagtcagtgg ggtcagtaaa   360
    
```

agccttatca gaccatccat agttttacaa tgtgatctgc tcttcctcag accactaata 420
tagaatccaa acaggtgaaa aatcgctcact ccttagaata caacaatgat ctgataagga 480
tttgacttan tggaangnaa aaaaaaaaaa aaaggggatt gccnanccta acccttttta 540
acaacttn 548

<210> 6023

<211> 543

<212> DNA

<213> Homo sapiens

<400> 6023

gaaatTTTT agttgacat aatcatcatt tatgccagac ggatttctgg aagtagagtt 60
ttaaTcacc agtgatctaa attcagtcaa taacagcttt ttTggaagca tctcactatc 120
atcctgaagt ttgccattgt tagatatTtc tttagctgac catagtTgag cttccttgag 180
ttcacgtTtc tTcccaattt cattttcttg agatattTtg ctactTtctg gtactgcttc 240
atcactgaaa gtgtcatttg tTtctatTtc catcctTggc cTttTtctaa cattgacatc 300
tTcctcctgt tTttgaactt Tcacatcaat ttctaactct ggTttTgtgt cctTgaataa 360
ctgtTccaat actTcatctt ctatggccac atcatccatt TccctTtttt nattTgatct 420
tagctTttct gcagcatgag attTactggc agaattTtTc acaatagatt Ttaaactctgg 480
atctggaaat aagttattgg ctgagttTgg gtcccaggct cattctcaga tagaagctgc 540
tnc 543

<210> 6024

<211> 599

<212> DNA

<213> Homo sapiens

<400> 6024

acattTccaa aatgtTttTc ttgtTtgtTt tgtTgtTtTc atctTgacta gcaccatctg 60

tacacaagaa agtatgaaca taaatgtttg gataataata aagattcgca aggcacttaa 120
 tcagtcattc tgggttgttt tgtgttcgct ttccacagca atcctacatc cacgcccctc 180
 ctttctcacg aaagcaagag aagagtgagg tctcttttgc tagcagttct tatgtacaaa 240
 caaggtcttt aaggttcctc aaagtgcctt ttcagtctca cagggttgg acaccctcg 300
 ggcttcccat cttttctcc ttccacgggtg tttgacgttt gcaccttcc tacagaaaac 360
 aaaagaaaac tcgccttcg ctcaacgccc gctccagact tgccaccaac cttcatcctc 420
 attcattgtc tttgatccc cagcacagag ggcctagggg cgtgcaacat ctctgaagtc 480
 ctggggagcg gggggaccac taggacaaag ggtctggctc atctaccggc gcctggaggt 540
 gaaggtcgaa gcaggtgatc atcatgaaaa tgggccttgc anaagttgac cccgnttnt 599

<210> 6025

<211> 585

<212> DNA

<213> Homo sapiens

<400> 6025

ctctcttggg tgtatcaaaa tctcattgag gcattctaaa ccaaagaaac ctctgaattt 60
 gaaacagggt tagtagggac ttttataccc agctgggcat ccanaagcc tggactctca 120
 ggactgtggc tagattttgc ccatgatctg tanattatgc tcttgcaccg ganacttgaa 180
 agttatgagt ttgcattcaa acaaagaacc accagataaa acagatgttc tctaaaactg 240
 aggaagaaaa gtttagagat atgcactgta tagagaaaga aagctttttg ctggattgtt 300
 ctctttgtta aggaaatgtt taaaactagt actcccgggc acctgtgatt gcattttata 360
 ggattctatt tagtaatatg atgtctatatt tacattcagc cccaacctac gtcactgaaa 420
 tagaatagga aatagcagcc actatctgag agtncccagt tctaaggaaa gtttgggcct 480
 cctcaagaag tccctatttc catagcctca atcatgaata nggcttggtt ttggganatg 540
 gaactattaa cngcaggaat gcctatactt canagccttn tantt 585

<210> 6026

<211> 534

<212> DNA

<213> Homo sapiens

<400> 6026

```

gagacgaagt ttgccccttg ttgcccaggc tggagtgcaa tggcacaatc tcggctctcc 60
gcaaccttcg cctcctaggt tcaagcgatt ctctgcctc agcctcctga gtagctgggg 120
ttacaggcat gcgccaccac acctggctaa ttttgtatct ttagtagaga cggggtttct 180
ccatgttggt caggctggtc tggaactccc gacctcaggt gatccgcctg cctcagcctc 240
ccaaagtgct gggattatag gtgtgagcca ccatgccctg cctaattctg gatttttttt 300
tttttttttt ttgagacaga gtcttgctct gtcaccagg ctggagtgtg gtggctggat 360
ctcagctcac tgcaagctcc gcctcccagg ttcacacat tctcctgcct cagcctcccg 420
agtagctggg actacaggca cccgncacca cgcccggnta antttttgga tttttaagt 480
gaaacanggt ttaccgggt taaccnngaa gggcntgaac tcctggacta tgaa 534

```

<210> 6027

<211> 555

<212> DNA

<213> Homo sapiens

<400> 6027

```

gtactcatca gaatgggata ctccacaact gtctcacaa ctcagtgccg gtacacatgc 60
tctagaggac ttctggactc gcagctacaa ctgtacaagt gcacacaagt gaatctaccc 120
tgttatcttc caccactga ttgaggatcg aattgcacat ttctcttaac catgacagga 180
gaaagcaaac agtgaaacag aatcatgggt gatctttctc actttccctc ttgttttcat 240
tggtttgtcc ataccattct aattaacatg aaagggtctt gcatatagag agattgtctc 300
actgacttcc tggatcaccg aaaaccatca gggttgaaat ttcatttgag tctttcctga 360
cgcccagcaa atattccccc tcggattatt ttacaccttg agggcatttt ggncttcagt 420
tcaacactct tgctctggtc ccaaattggg cgctatttaa gggaatttaa agagaaagct 480
gagaagaata acntttancc gagntctctt ggcatthaan ctcttgaaaa ncccnggatt 540

```

aaactattca tgcng

555

<210> 6028

<211> 584

<212> DNA

<213> Homo sapiens

<400> 6028

```

gtagaggaa gggctctgcc cagctgattt caaactcctg ggttcaagca atcctccac   60
ctcagcctcc ctaagagctg gcattacagg cgtgagccac tgctcccggc cttgttttat  120
gcatttttcc atatgtaggt aatagctcat aataaaaggt ttttttgaaa atacacaaaa  180
aaactaccat tacactccca ccagactgga aacaatttaa aagtccaacc aagtttaate  240
aagtgttgtg caaaaagtag aacaaatgga agtctcacac atccctgatg ggagggcaat  300
gcattacgcc actttgaaaa ccagacaata tatgataaaa ttgaaggga gcacacccta  360
ctcagcaatt cctttcctaa ctatatgctg tcaagaactc ttgcacacgc acacatgtat  420
attcccaggc atcttctaaa gaaaatgggt ggtatttgtg aaggttangg ttactangaa  480
aagtcgggcc ccgtggctta cgcctgnaat ccagcttttt tggaagcaaa gccggaagat  540
ggtttgancc cagaattnaa aactggctga accatttang ggga                      584

```

<210> 6029

<211> 536

<212> DNA

<213> Homo sapiens

<400> 6029

```

ctcttttatg gtgtttattt tctatttcca ttgaacagtt gtattttatt tngtctttc   60
actgtaaate acctccaate tttttttttt gggggggatg aagtcttggt ctgtccgcag  120
gctggagtgc agtggccgtg atcttagctc actgcaacct ccgcctccca ggttcaagng  180
attctcctgc ctcacccca acacagaaca tattgtcaga aaacacctcg ggtctctgtc  240

```


tcttttggag ccaggcggtg caggcctccc tgggagctac aggcagcctc gagtacttca 300
 gctcagtagt tagccagccc atctccatgc caaaccact gacgtagccc aacaagccgc 360
 tgcggtanag ggtctcatta tcgggcagac agaccgggag gacgttgggg ccaggggga 420
 tgctgngctg cagctccagg agggcgatgt ccccgctaaa gttatgggac tcattctgac 480
 ggtanncggg gtgcacaacg acccgngnga cagggggggt ccccagttnc nnatnt 536

<210> 6030

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6030

ccgggttatt attttttatt aagatcaaaa tacaagtccc actatgaact ggctgttctc 60
 acaataaata acaataactt acgtttgttt gtccggcaaa ggctcacata ctctgtctc 120
 cgtcgaataa cttaaacact ttcaaggcaa gtctggtttc tactgtttcc cagcaatcat 180
 gcgctttggg agtttgagtg tctgttcctc tgagttatcc ccttcctttt ccccgctagg 240
 agcccgggcg aagccgccag ggagcgctga gctggggcag ggcgggggtc cgcgtgggcg 300
 agctccgggc cggccgagat ggggacacag gtggggcggtg gagagacaga gcggcgggca 360
 cgtagagagg agaggagagg gcagagctaa ccctggttaag tcccagaatt ctggttttga 420
 aaaactaaga gtcctcgga gcannggtct ggcagtctgg tgaaagcagg ttgcatcctg 480
 gcgccttggg ctgttccaaa accgngnctt ttngnacttt ttcataaata ccattgaata 540
 attncnaagg caaaaaacnt tt 562

<210> 6031

<211> 563

<212> DNA

<213> Homo sapiens

<400> 6031

gtctctgtag gatactaagg tacaggatgt ggtaatatgt tcaggcagtc agatacagga 60
aatatttatg gtacataata taatatcttc tcatgtccag gtgttgaact ctgaagtcta 120
gtgacttgaa tttgatctag ngaaatatat actcacaag ngaggaatta tatctagaaa 180
tctgtaattt ttaattgtnc cgctaaagcg ctttaccttc tttgtactt cttgaaaata 240
ctggctgcat tgcaacagaa gacaaatatg attaattgtca tgcaattcat aatatcttaa 300
attgcattgc tggattcttt ctcaattaaa agaaaaaatg aaagaaaaag gcttttaaaa 360
tgtttttcat gcactgata acagtgcacat agaaaggaaa aaatgaaaca tagttcagaa 420
tcttaaaagt aagaataaat ttcagccagc cngacatgac tctattcaac aaacntgatt 480
gancggattt aaggtatagc taaaagggt taaatttcac ttggtatccc aatccttttt 540
tttttaatta anggtanatt tta 563

<210> 6032

<211> 503

<212> DNA

<213> Homo sapiens

<400> 6032

canatctgtc gccacagcag cggacacgtt taatggcagg cgcctntaca gttacaagac 60
atgcctgagg tcagttcgcc cccttagggg gcactccccg agctaaacac agatgacagc 120
gaccaggggt gctggaggcc cggggtcacc tgaggactgc anaagtcctg cgctccgnta 180
actgtgtgga cacgcgntg ccaggggcac aggtaggcaa catggatggg aagagagccc 240
aggccgcccc cgtnnacag ctgcagagca cgcagaccac ggcaactgcag gcccaaccagg 300
canagctgct ggtgcgacac atcctggggc tgggctggtc ggggagaagc tctcccgtg 360
acgctgcctg ggcctgcccc tgcagggccc gggaaccgag cccaggcctc tgtttctctg 420
anaggctgga gcanaaccct tgggtggccct ggaaagcggn tgcaangggg gccttaatca 480
ngggaggcac ccnggcgttg ngt 503

<210> 6033

<211> 569

<212> DNA

<213> Homo sapiens

<400> 6033

```

gagacgggag tctcactctt gttgccagagg ctggagtgca atggagcgac ctcggctcac   60
tgcaacctct gcctctcagg ttcaagagat tctcctgcct cagcctccct agtagctggg  120
attacaggta cccaccacca tgtccagcta attttttgta tttttagtag agatgggggtt  180
tcaccatatt ggccaggccg gtctcgaatt cctgacgtca ggtaatccac ccacatcagc  240
ctcccaaata ctgggattac aggcgtgagc cactacaccc ggctaccttt tggccttttt  300
gtttcatctc atttgactgt cttctttttt aattcctatg tttcttcaaa tgaattaacc  360
gtttcttttt tgatcatttt ttttttgcct tccttgctgt acacacctct ctttgaaatc  420
attccttatg gctcctctta ccatattcct tcatcaagtg taatattatg agatttctcc  480
atgattcaca catgactttc agctgatcnt tacttcttag ccttaattcc ctnactaan  540
ccctctggca ttnttagaat aatgggtta                                     569

```

<210> 6034

<211> 582

<212> DNA

<213> Homo sapiens

<400> 6034

```

catgcttttt ttaaaaaaaaa aaacaggaga aagcgaatac agaggaaaga gagaataaaa   60
ttaattggga gatggagatg atatttgagg atttgaaagc aaacaagatg taagagaggc  120
cctctttgac tgaaaatgac acagaaaaag gtgatcaagt cttccagggc ctgctgttac  180
tgatggagac tacagctaca atgaaaaatt actctcacta ccatactctg gggaaggagc  240
gctctagttg caaggaattt gtaataaag gccgagagac tctaacaaac aagatggaga  300
acaaaaacaa agattccatt aaaaaatttg ttaagtgaac aaccaagacc atctcagtgg  360
acaaaagagc cagaactctt cctcgtagag ccggcccgtg gggaccgcac ctgccgccca  420
aagagtggcg atttgaggnc cttctcctgg aaagtgaata gctggagttc tgaaaaatgg  480

```

tcccttctct ggactgnggg tttatttctt gggatcttgg accaaaggan ggnctgggt 540
ttcttgtaa gagcccaaa aaggtcttta atctaaaagg gc 582

<210> 6035

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6035

gagaaaaaaa ttgggctttt attggcaatt acaaaagtaa tagattttct tacataatac 60
gttccttcag taatatattt ttcaagtatc ttaccataga atttctaaag tactttgtca 120
ttgaccccat aatttattat aaagtaggtc ccataatcac attttttgga agttgctgaa 180
attgagataa aaaatattgt ttttttatga gaaaaaccgg acaaaataca gaatggccaa 240
aactagatta actggctcag ttatgtctac taggtgaaag aaaatacaga atctgttact 300
gtagaaattt taagaggttt tgagtcagtt ccagtataaa aataaggcca aagttctcct 360
gtaaaatcat cattaaaagt cagagaagag atctatcatt caaattataa aaggaaacct 420
cattcatttc acagtctaaa aaaaatgccca atcttactag gnggtacttt tggcagcaga 480
ataatttcen tatgggccaa taccatataa ttanttcga ctggataccc aaatcttcct 540
tatccatcct ggacttaaaa tgggtggctc ttctcctgg gggaaggn 588

<210> 6036

<211> 542

<212> DNA

<213> Homo sapiens

<400> 6036

gtacacaaga acttatgttt attgcaaaca acaaaacaaa aaaaaaagga aagagaggaa 60
aagagaaaat ggtcagaagc acaacatata aggttaagaa tttaaaagca tcttacattc 120
tgccctaata gcagcataat taatagcaac aaacggccgt cttgctgcct gccgcagccg 180

gagggtat ttttgcagacct gacgagcaaaa ttttgtgaaa tatgtagtat gaaggaagaa 240
 agcttggcgg gtcttcactg cagactttgg actcccagtg tttcggactg gcattccctg 300
 catggcctgg cgggacacgt gacttctaac acgagggtcc tctgtagttg ggctaggaga 360
 taacttctct tcttctgact ggggtgggcat tttcaagcct ccatat tttt tccaataaag 420
 ccaacaaata gcacataatc tacactgcat attaggnggg cccaagaat ccctgggtgag 480
 actngntanc ataacaactt ttacangntt ttccttaaaa angattttan gcttgaacgt 540
 gg 542

<210> 6037

<211> 586

<212> DNA

<213> Homo sapiens

<400> 6037

gagatggagt cttgctctgt cgcccaggcc agagtgcagt ggcgcagtct cagctcactg 60
 caagctctgc ctcttgggtt cacaccattc tcctgcctca gcctcccaag tagctgggac 120
 tacaggtgcc caccaccacg cccggctaata tttttgtatt tttagtagag ttgggtttca 180
 ccatgttagc caggatggc tctatttctt gacctcgtga tccaccacc ttggtctccc 240
 aaagtgttgg gattacaggc gtgagccact gcgcctggcc acctcaatta tcttttttaa 300
 aaggcattat gaaacactga aaatctatat tgaaatcagc aaacttcaat atagcaaggg 360
 aagatttagc accaacattt taattgactc attacaaaaa ccccttcccc ccaaaagaag 420
 atatttcttg attttttata tttaagatat cctaaacatt tttattcatg ttacaacttg 480
 taacacaagc accatgcatg nattattgaa atgtctgggt ttttggttgg ccttggtttt 540
 aatggaggca aggctnactc tgggtggccca gctgggagtg canngg 586

<210> 6038

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6038

```

gctggcaata aataagatat ctttattatg attatgttaa tagttaaaat ttgcatgttt 60
tctagatagt ctgttaacag gataaaaaaa tacaaaaagg cgagcttctt aatgattcag 120
ctgaattaac tataaaatta aaataacctgc taattattat cttctaaaaat aacacaaaaat 180
atattcaata cgcaatacaa acctcagtaa tccaattctc ctaatatgca attatttata 240
acctctgaac taagaggaag tggtttgact aaacagagaa ataacaatgt ttttatccta 300
agtaatctat actttggagt agaaatactt atttaataca atatgttaat tattaatatt 360
tcacaaggag taatctttat tttgaaaaac aatgttaatt ataccaatit ttagttataa 420
tttggttagtg ngaattcgcc caacctaaat tcctgnngnc ctggaaaata ccacttttta 480
aaagctagna ttaatcattt ggacacaggt tactaattca aatggcatct caatctactt 540
atcnttaang gaccgaaatt aacatctttt tgggtg 575

```

<210> 6039

<211> 577

<212> DNA

<213> Homo sapiens

<400> 6039

```

gacaagaaag ggctctgtca cccaggctgg agtgcagagg caagatctcg gctcattgca 60
acctccgcct cccagggttca agcaatctga gtgcccatit ctaaaggact ggcttgtgga 120
gagggcaaga ggcgataagg agaaggctag ggcaggcagt gctcaccttc ttcaggatga 180
tatcgatgta gccggcaatg agctgtgcaa tctgctcccc ttcagttgtc tgtactgagt 240
aatagccatc ttggtaatct ccaaaatcct aggggtgcaa gtggggggact cagagggaaa 300
gctcaaatct atccaggatg gaaatggcta ggatgggagg cccaagggtg agctgatgag 360
atgccttccg tggcaacggc cctcttggaa gatgccacc tttcttgaac ctctcttta 420
ttttctcctt ggagggaaaat ttttacttct gaggagtggc ctctacacta caccagtten 480
aatccatata atttaaggaa gtctcttaat tttactctga tgataaaatg agaggattta 540
tattggcata aaaggccccc tttaaggtng cttgtan 577

```

<210> 6040

<211> 607

<212> DNA

<213> Homo sapiens

<400> 6040

```

agagttgcta aaatgatgta ctactgcatg tattgcaata ctcaggcctc ggaaagcttc   60
ctttctcccc acattggaag gtttttatgg ttttgtcatt tagtatggag caaaacggtt  120
gtatccccct cggtatatac tagcctgcaa tgaagaaaga acgagacca catcatcagc  180
atggctccta gtcttgcat cagtcaaagg tgcaaaagca ttcattggcac caacgccgta  240
ggtgggggct ggagcaagtg cgtgggtgta ggggtcggca gcataaactc gtccgtaact  300
gtcactgtag gcagcggcag tggcaggggt aggtcgggcg tagcggtatg cagcataacc  360
accataaatg tctgcacat aaaatccatc ctggtaaaca acacccgccg taggcccggg  420
atcgggggcg ggggccgccg cggccctgaa ggtgtgttac acggtgcgac ccgcggnctc  480
gcaagtgcgc ccctcggtaa gcggcccggc ggtggcttct tggataccgg naagcctggc  540
anttgcanaa atntttccaa gtgaactggg gggcncgtgc catggaaaaa anccctcctg  600
ggtgggc                                           607
    
```

<210> 6041

<211> 592

<212> DNA

<213> Homo sapiens

<400> 6041

```

aactaaatct taattttgga tggcttacct aactattaac tggcagagct ggggtttgag   60
cccaagcaat tcagtaaaaa agttatactc ttaaccacta tagtatgctg cttcttcagt  120
atttacatat gtttgtcagg aagaaataac tttttttttt tttgagacgg agtctcgtc  180
tgtgccagg ctaaagtgca gtggtgtgat ctcggctcat tgaaacctcc acctcccggg  240
    
```

ttcaagcgat tctcctgcct cagcctccct agtagctggg actacaggtg tgcaccacca 300
cgcccagcta atttttgtat ttttagtaga gatggggttt caccatgttg gccagtatgg 360
tctcaatata ttgacctcgt gatccgcctg cctcagcctc ccaaaagttc tgggattaca 420
ggcgtgagcc accaagccca gcctgaaata atttcttaac aatgcctaac acagncttn 480
catacatttt aagaactaat aaatacttgg ttcttccaaa attggcaggc accaaangta 540
attgggactt agttcngggg caggaaaagg gaatgaaaac tnttttaaaa ga 592

<210> 6042

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6042

gagatggact cttgctttgt tgtctgttgt ccaggctgga gtgcagtgga acaatctcgg 60
ctcactgcaa cctccgcctc ccaggttccc aggttcaagc gattctcctg cctcagcctc 120
cctagtggct aggattacag gcatgcacca ccaagcccag ctaattttcg tacttttagt 180
agaaagaagg ttacacatg ttggccgggc tggctttgag ctgctgacct caggtgatct 240
accacacna gcctcccagg gtgctgggaa tacaggcagg agccaccta cccagccttc 300
tctctcatct ttattaatct aattcttatt tgttcttcag gagtcagttc aagcataagc 360
atctcacaag tgcctccttc cctcccagtc tgggtcaggt gcccctctta tgtactcact 420
caagccataa gcatgtctct attttaaaag taactggttg cttgggggtgn ctncctacca 480
gaccctaagc tctttnggga ttatgtcgga caatcttctt canagtcact gggccccaat 540
atntaacang gatcctaana cgggttaagc attttccaaa ngcttnctaa a 591

<210> 6043

<211> 606

<212> DNA

<213> Homo sapiens

<400> 6043

```

cttttttttt tttttgcctt ttccaaaaca gatgattcat ttgcagatta aaatttcaac   60
catatacaga cagcttcaaa agatcacccc tggccgctgc ccctatctgc acagctgcct  120
ctcccatctc ctctccctac taagcaacct ctttcttctc tctgcagct cacacaatgt  180
tcatgagcat accatcaaatt acaaatattc caatttttcc tgttcccttc acacaaatgt  240
agccttctct ctatatactg ntctgtactt tgctttttta ttgtagtaa tttttccgca  300
acaggacaca aagagcaatc tcattctttc tggaggtcca tgcagaatac tgccctcaat  360
ggatgtcacc tatgtgacca gtccccactg atgaccctta cactgaaaac cggcttacac  420
aggagtggtc tatgatctat gatgtattaa catggacatt tcttctttca ttatgaattt  480
gtaaagggtt ggatttccat aattcttttt taatcagtgn aaacataaaa taagggtttg  540
ganaagagat ncaggaagcc aatttnggaa ctttnggttt gggcccnca tctttaaaat  600
gggnct                                     606

```

<210> 6044

<211> 582

<212> DNA

<213> Homo sapiens

<400> 6044

```

ggtagttctt agttttatta taaccttgta ttttctggca aaaatataaa tctaaatgca   60
tgatctctgg gcacacagct caagtatcag cttgagatg acctaagcag caaaaatttg  120
gcctatttta ttaaattgcac aggaggttgc agccgcattt attagaaaaa tattatcctt  180
tggaatttcc tttcttgaag attggctcca gggcgttggt ctttctgttt ttatgcaatt  240
gcacttccct ggccaggcagc caggcgctcc ggtgctcaca ggccatggga cagtccagtt  300
ccctgcagac ccagcggggc atgggcggac agagccgcac cgtgaagccc gcctgttatt  360
tccatcgggt ggtcctggag acgacacggc tggggaaatg ggtcaccgga actccacggc  420
ggccagacgc ccatccaatt tgcctgcggg aactcgctct tacctttctt acaaacttct  480
tttgggaagc tnggatttaa cgttccgcca gttccaaggn gctgtcccgg actganggta  540
ctgaccggtg ganagcattt tgacaaaggg gacaccggg at                                     582

```

<210> 6045

<211> 589

<212> DNA

<213> Homo sapiens

<400> 6045

```

agtcattttt aatgcatttt tctctgtgca caagagaaat aactgatgaa gtcaaaagac   60
acactttcct ttatacatag cagttaaaag taatgcaaac atcacatgac actttcagtg  120
aaagttacat ttccaattac aaatcaaaaat gcatattagg gtctctttat gggagaagct  180
gagaaggaag tcttaggtaa aaagcacttt cctggcatta ctacactgat ccttcaggct  240
gcacaaaagat taaggtcata tacagtcaat ctgcaaatgt tgacacaatg ttacactgta  300
aattttctgt acaattaaat gtatacttag agataccagg ataaacattt ctactatatt  360
ttaactgaac ttgcctagcc aacattttca ctgagaagtt tatcaaagat gctgtaagat  420
tctacaaaat tgtgagacat aactagcttc agaaacattc ttgnattctt tctcattttg  480
ggtaccatat tacactcaga ttctactgna atatttttag aatgtccgng ccaattngnc  540
ttactnggnc ggattccaaa tntngcaaaa agaccaatgg gtttaaatt               589
    
```

<210> 6046

<211> 454

<212> DNA

<213> Homo sapiens

<400> 6046

```

ctgggtgagt gtcactagcc aatcatagga ttatttcttt ttttgagaca gggctctcaat   60
ctgttgccca ggctggggtg cagtaatgca atcatagctc actgcagcct caaactcctg  120
ggttcaagcc atcctcccgc ctcagcctcc tgagcagcta agactacagt catgagctat  180
tataacatgc ctggctaatt tttttaattt tttatagaga gaggggtctac catgttgccc  240
aggctgggtc caaactccca gcctcaaagt atcttcccat ctcagccttc cagtgttgga  300
    
```

attacaggta ggagccgagt ccataggggtt attgngagga ttcaatgaga taactnatgc 360
 aaagtgtca acangatgcc ttgtatatac taangcctta atgttgccn ccnctcacac 420
 acatgcacat tcacncatac acangcagac tggt 454

<210> 6047

<211> 584

<212> DNA

<213> Homo sapiens

<400> 6047

aacatagaat ttatTTTTTA gagcagtttt aggtggaatg gaaggtagag agatttccca 60
 tatattccgt gctcccacac ttttacagct tcctctatta tcaatatctc acaccagaat 120
 ggtacattca ttacaactga tgaaccacaca ttgacacatc gtcacacccc agagtacaaa 180
 gtttacattg aggttcattc tcggccttgt ccattctatg catttggaca aatttataat 240
 ggcatgtatc caccattata acatacgaag tagtttcagt gctctaagaa tcactctgtgc 300
 tccacctatt catctcctgc actcccccaa caccgggcaa ccactcatct tttactgtc 360
 tccatagttt ggtcttttcc aggatgtcat acatatttgg aatcacgcat tatgcagcct 420
 tttcagattg gcttttttca tttagtaata tgtgnttaag tttactccat gnetcttcat 480
 gacttgatag ctcatctctg gantanggct gagtaatact cattttctng gatggggccc 540
 aaattctttg gccattnecc tncncaaagc ctttttgng gggt 584

<210> 6048

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6048

cattcgatta aaatattttc actttttcct gtgatttctt ctttgatcca caggttattt 60
 ataagttagt taatttccaa atatatgggg gctcttctag gtgtcttgta tttatttcta 120

atctatatttg tgtgcagata acataatctg taagatgtca ttcttctgaa atctatttaa 180
 acttgtttta tgattcacc cttatggcagc ctgtcttggt gaacattcca tgtgcatttc 240
 aaaaactatg tatattctgc agttttgggg gaaagtgttc tataaatatt aagttaaggt 300
 gggttggttg gtcactcaga tcttctctgt actgttgtat agttgttcta tcaatcactg 360
 agagcagtggt gttaaaatct ccagacgtgg ttgtgaattt gcttatttct ccctttagtt 420
 ctgcagcttt tactccatgt attttgaagc tgctattgat gcagatccat ttatatctac 480
 caaatgggtat ggatctttat aaattatgag tgnccctttt ttggccctaa cataattcct 540
 ggcttgagcc taatttgggn gnttccttaa cctaccggtg gcagggg 587

<210> 6049

<211> 590

<212> DNA

<213> Homo sapiens

<400> 6049

gagacggagt ttcactcttg tcaccaggc tggattgcaa tggcgtgatc tcggctcact 60
 gcaacctccg cctcccgagt tcaagcaatt ctctgcctc aggcctccga gtagctggga 120
 ttacaggcgc ctggccacca tgcccggcta atttactta gcattttctt tcttcagcac 180
 ttctaacatc cttctattca tcagatttct gaaaatgatt aggcagtatt attaaaggta 240
 cttgtagcta tggctctctg agtatttccc aaatgcatgt aaatatctgg gttgggaaag 300
 ggggaacagc agaaataaaa gtcataaaaa ctgaatgaaa cacataatat ttgaaagcaa 360
 attcgaaaaa aggctagtga gtctcatcat tttccttgca gtgataactc ccataattct 420
 ctgtttattg acaaaaaaga gactattgtg aaaacagaat tcctaaggca ttaatctatg 480
 cctcaactaa ggaagttaga gagaaaccca gggntcagnt cccaacttca cctggctttt 540
 tcatgccita ncttttggct naacctaat tcttgaagc atggaagggg 590

<210> 6050

<211> 551

<212> DNA

<213> Homo sapiens

<400> 6050

```

gagacagtct cactctntca cccaggctgg gctgcaatgg ngcaaccttg gctcactgca 60
acctccacct cctgggttca agngattctc ctgcctcagc ctcccagagta gctgggatta 120
caggcgctg aagccacgcc cagctaattt ttgtattttt agcagagacg aggttctgcc 180
atgttggcca ggctggtctc aaactcctga cctcaggnga tccacctgcc tcagcttccc 240
aaagtgctgg gattacaggc gtgagccacc gcaccaggcc tcccaaaaca ctattaatgg 300
aaatattttg ngaagttaag agctttttaa atcacacttc tgagtatttc caattaacaa 360
actgttataa cccagggctg ctgcatgtta ccagtggggg ataagtgagg aggtgtgtca 420
aactgtcaat catgatgcac accgatttaa tacagtgttt tggtingcaag acttttctca 480
aattcangga acagtgcagt ggatttacna tcatggcata aaaatncttt aactcacntg 540
nggatggttt n 551

```

<210> 6051

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6051

```

ggagatagag tcttgctctg tccccaggc tggagtgcaa tggcgtgatc ttggtcact 60
gcaacctctg cctcctgggt caagcaattc tcctgcctca gtagatggga ttacaggtgc 120
ctgccatgag acccggtga tttttgtatt tttagtagag atgggggttc accatgttgg 180
tcaggctggt gttgttgaac tcctgacctt aggtgatcca cctgcctcag cctcccaagg 240
tgctaggatt acaggcatga ggcaccgtgc ccagtcagct gcttgtcttt taaataaagt 300
gaatttcaaa aacagatact tcatattctg ggcatagcat cacacataca accacattac 360
caatataata atattaaatg attacttaac agacatccta ataacgcaaa caccttttat 420
tcacatttgc tgagtagcaa ttacagngtt tcttcattag ttttccacct ggtaatggaa 480
ttatgagcaa ttctaacaat ttaagtccea aactttgacc aacaataatc ncaagggtta 540

```

taacaactgg acttnaaggc cnccttgatt tttcccccc anttggn 587

<210> 6052

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6052

cagtagcaca ccttttgttt attgacctat gtaaaaaaat aataggtctt gaaaagtcag 60
aacaataaaa gaatatgcaa aaaggttatt tctgattcta gaaggctata caaatatgca 120
aaaaaggaat aagttatttt tttttgcttg tcttttttcc aaaatttttt cccaaacttc 180
atttctaatt atacaaatga ctaaggacca gttaacaaa tcgtttttat gtatatatta 240
catgcttttg aatatagata gaaaatgttc caaaaaagtt gttcagaaac ttttctattc 300
acaatatgaa caagaaactt gtataaaaaga aggggggaaag gagcaccttt tatgtaattt 360
tgaagcaaag atgacaaaaa agatcaatct ggaatatgga aatcatttgc tttaaaaaac 420
aaacaaacaa aaccctacaa taaaccatag ctaattagtt cttccangga aagtttgagg 480
nagtttagcc tcataattaa atccccgnag cttgggactt tttggcctng tgggggtttc 540
ctttttaagg taacctggnt ttggacttgg ggacttggaa cacttgggga a 591

<210> 6053

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6053

gagacagggt ctctccctgt caccaggtt ggagtacaac ggcataatca aagctcactg 60
taactctgaa ctcttgact caagcaatcc tcctgcctca gtctcccgag tagctgggac 120
taaaggcatg caccaccatg cccagctaac ttttgaattt ttctgtanag atggggtctc 180
cctatgttgc ccaggctggt cttgaactcc tggcctcagc aatcctccca cctcagctct 240

acttttttct ttctttcctt ctttctctcc ttctttccat cctagcaatc ctcccaccta 300
 aactgccctt ccttcttcc cacctaaact gccctgccct cccctctcct ccactcccct 360
 cccctccctt ccttctttc ttctttcctt ccttctgtta gccttggtct cccaggctca 420
 agtgatcctt ccacctcagc cttcagagta gctgggatta caggcataca ccaccatgtc 480
 ggactaaten ttaatttttt gnggggatgg gacctactat ggtggccaag ctgggcttaa 540
 acttttgaac tcaagcagnc ctctggctta anc 573

<210> 6054

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6054

cccctgggga ctcaaggcag aagtgccact ccctccgttg accacggctg ggaggggtgc 60
 ctgtctcttc agggaagagg tggggagact aacaggttcc ctcccagctc aggtctacac 120
 tgacttcagt cgtaactggt tccagcatcc ctcaaccag ttttatcacg cggctctaggc 180
 ccaaggtcca gggctctggg actccctccg atgtctccac ccctggcccc tgcaccttct 240
 ggcttctgca gggaccgctg ggccctggat gaggcctctc ccacctcgtt ggaagaccag 300
 agacaccttc ggatgccacc ttgacgctgg agcggatctg gacctagccc agcagctccc 360
 aagtgactgt gtttcagca gcctgatcct tgttgaggcc cagggaagtg tcccaggccc 420
 cgacttgcca gacgaggctc tattccggct gctgaacca cttttctcct ttatttaaatt 480
 aaatactcat tctgggctgn acacgttcca agcancangg gcangcaanc ccggtgccct 540
 tgcgtggcaa gggaacaact tggcaagccc ttacttgggc gaattccg 588

<210> 6055

<211> 595

<212> DNA

<213> Homo sapiens

<400> 6055

```

aaaaaaaaaga agagttatct acccagcaat ctgtttccct gtctggggga gggggttgca 60
tgcaggctgg gggacaagac gggcagctgg aggtgccagg atcaatggcc tcaaggggtg 120
ctcccaactg ggtgcttttt cccatacaac ctagcgctat gcagggtgctg aaggtgacac 180
ctctgctctt gagatctggc tctgagtagg cctgaggtgc acgcccctct gctctctcct 240
ccccctcccc ctccctcccc agagagaaaa cactcacttg ccaggtttat ccagaagccc 300
ccccgcaggg cactggcagc acatcaggat gtactcctgc agggcctgct gatggaacat 360
ccagtggctc atgctaaggg cagggtcacc tgttgaaggg caaagggtca gtaaggggccc 420
ggcagatcca gccaagtatc aatgacctaa ttccactttc tcacctgggg gaaatagtca 480
aggnttcctg ntcccccttc ttctttcatt cattcttggg acaactgnta tctttcccca 540
tgtcctacgc acaagcatgt cttttttcct gaacntttga catggggtna aaaaa 595

```

<210> 6056

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6056

```

ccgtctggtc tcataaccac tattgatatt ttccatggat tcagaactac gttttagaac 60
agggcactct gggttttctt tgaggcatgc acagtccacc ttgtacttac aatttcata 120
gtcaaaatca aaggcaatag taatttcagt tccctttgga atactgtgta tagaataaat 180
ataaagatgt atggttccat cttgaatttc atgcctcacc tctgcattgg gtgtacaaga 240
ccgcctgatg aatcgagcct cattcccaaa agtccttgca tcaacacaca tttctagccc 300
atgaaattta gagtagaata acacaaaagg gtatggctctt tttaaagaaat acccatttgc 360
ttcaaactgt tctctcagca taaacttccc tctgtattca atgataagt catcaggagg 420
caaatctttt gcagatttaa gaattttctt atcttttggga tatggctctc tacaggaggt 480
ttgaagagcc aaatgggtggg attcaaatcg gattaatcat cncctttttg gcanttccat 540
ggccaaactc aaactatctt tggcctcctt tgaacacct n 581

```


<210> 6057

<211> 429

<212> DNA

<213> Homo sapiens

<400> 6057

```

gaagggcaat ctttcaattg cttaaaatta atcagtgcaa agtgaggtaa aagatccccg    60
tttgtcaggg ccgaggcagg aggctcacac aagcctgcgt ctcttggagt ccctccccag    120
gtccccctcc tngacatcca ccttacagcc cagtggggac accaggttca gcagagggtc    180
ctcagaggca cggccgaaga gcgccagcag gagggccaca ccgaancctg tggtcgcctc    240
accagcatgc accggtgcag caatgtccag gtggaccag actccgggcc agtcgaagcc    300
gatgtgtgag gcgatgaaga ggccagcaca ggagctgggg ctgttgtctc ggtccgccac    360
tgagttcttc atgtccgcca cagctgaggt gaactcgctg aagtgcant nggggcanta    420
naccanngg                                     429
    
```

<210> 6058

<211> 533

<212> DNA

<213> Homo sapiens

<400> 6058

```

gtgacgcagc atcaggtgct tttacttcag tgaatgaaaa ataatggtca caactcaaat    60
gaatgggaat ttaatatgaa tatatgcacc ttaccagaga tgtttgctac caatgatatc    120
ttagcaattc catattcctt acaaagtcag tataattggt gtaaaaaaat caactgtggt    180
tctgaatacc cattcacagt tgacctcaac aatgtatctg atgtaggaga ctgagtatcc    240
gtgacaggca gaagcatgtg atggctctca gtcccaagtg gaagagctaa tggtaaagtc    300
atatcagaag gcttcacatc catagtttct gataaaggac ttttttgtat ggaatcctgt    360
tcaactcaaag tatgatcctc tgcactggag tctagagttt tatctgcacc agaatggact    420
tttgttttgt gcttctttaa atttttaata tctngntaag aatttncaca taattcgcag    480
    
```

ataaatggnc tttctnctgn atgggacccn aagtgtttgn tgagctcttc cgg 533

<210> 6059

<211> 523

<212> DNA

<213> Homo sapiens

<400> 6059

aaagcaaata aaacatttat tgttcagatt ttttccatt ttcttccttt ttacaaaaac 60
atgcatacat acacagggtg tggtaggtcc taggaaagac acacacacac gcctcactca 120
cacacacgct cacacacacg cctcactcac acacatgctc acacacattt tccttcttga 180
ccccaggcct ggacccccaa aagccttgaa gactttgcca gagcagcctc ccctcctcca 240
tgtctgtatc ttctctccca ccccttcccc ctgagtcagg ctattcctat gtgggggtggg 300
aatcagagct atggtggggg aggccccaga aacagagaag gctccccgag tggggcagtg 360
gccgaggggt cccaggggta tgctgcgctt ctgggggaga tgaagggttt ggcaccattg 420
gatcaggaag cacaggactn ccagagcacc catctgntnc accangggca tcgncaggaa 480
ggttgatgta agggggcctn tggcnagggt ccgaccaaata gga 523

<210> 6060

<211> 585

<212> DNA

<213> Homo sapiens

<400> 6060

aaatatattt tttagacgg agtctcactc tgttgcccag gctagagtgc agtggcatga 60
tcttggtca ctgcaacetc cgcctcccgg gctcaaggga ttctcctgcc tcagcctcag 120
ctggtattat aggcaattgc taccatgctt ggctaatttt tgtatttcta gcggagacga 180
ggtttcacca tgttggccag gctggtcttg aactcctgac ctcaagtgat ccacccgcct 240
cagcctccca aagtgtggg attacagggtg tgagccactg tgcccggcca catctgtact 300

tttaagggtta cagctttaca gtacatagga atttgagaac cacttcacag gaagagggaa 360
 acagcccaat atttatttat gtatacacat aatcccaagt gtgtgctggg gccaccaggc 420
 ccttctgggg gaacaaggac tgtcgtgcat gtgagtgcg acattaataa gcatttacat 480
 actgtacaga tgcaaccttt tgatgatnca tatantttga taaaaattga gaaaacngnt 540
 ttgttgtana ataccttngc cactttttta gcatgagaac agtnc 585

<210> 6061

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6061

agacatcaga aatgtattat ttcatagttc tggaggctag tagtccagta gtagtccaag 60
 atcaatttgt tggcatgggt gattccctcc ctcccttctt tccttttttt tacagggtat 120
 tactctatgc ccaggctgga gtgcagtagc tcaatctcag ctactgcag cctcaacctg 180
 ctggactcaa gcagtcctcc caccacagcc tcccaagtag ctgggactac agataactcaa 240
 caccacaccc ggctaatttt tttgtagaga tggaatttca ccatgttgcc caggctggcc 300
 tcgaactcct aggctcaggc gatctgccc cctcaacctc ccacagtgt ggtattacag 360
 gcgtgaagcc accacgcccc accaagattg atttcttctg aggggtctct tcttggccat 420
 cttctgtgtc tccccatggt cttccctctg gtatgcgtct ttgtcctgat ttcttcttcc 480
 ttggctggtg aagaagccgc cggctccggg tcanaaactt tgggccggct ggtggttctg 540
 agccatntgg ccgtctgntn ggttcactgg ttggaatctg 580

<210> 6062

<211> 586

<212> DNA

<213> Homo sapiens

<400> 6062

aacattaagt gtcatttttaaaaatgggtt aaataagcag cattgctgag gatggccgtg 60
 cagggtgat tatcccctat ttgcacgttc tggcgggtggg aaggctagaa gtctaatagac 120
 tgaattatcg ccctaatagcc tctcgctggc tgggaataat cccggggcaa cagctgccgc 180
 ggggtttttg gctggtttcc tctaattgca tccagattaa gggagttgtg gaggggcggg 240
 gcttctccat cccccgcgga gcagcgtctc ctccgccaag ccctgaacac ccaggtcatg 300
 gcttccgagg tcctggctgg tccgagagggt gcagacctca ctgggggtccg ggccagccca 360
 tggggagcgt gaggtgcgag cagtgcacgg tgggggtggc acttggtgca nagatgcanc 420
 tgattggtcc gggtcatgtc ttggggagca ncanggtga aaactgtagg gccaggagac 480
 tcagaaggaa atgccttcta ctaggacctt nccaatgaag gggagccctt ggacctgcta 540
 tcctcttctt ccttccaaaa acaanggggtt caaagcacna aggtnt 586

<210> 6063

<211> 579

<212> DNA

<213> Homo sapiens

<400> 6063

gaggcagagt ctcgctctgc tggtcaggct agagtacagt ggtgcgatct cggctcactg 60
 caacctctgc ctcccaggtt catgcgagtc tcctgcctca gcctcctgag tagctgggat 120
 tacaggcacc tgccaccacg cttggctatg atttttgtat ttttggtaga gacagggttt 180
 caccatgttg gctaggctgt tctcaaaactc ctgacctcaa gtgatccacc cacctcagcc 240
 tcccaaagtg ctgggattac aggcatgagc caccatgccc agtctatattt tattttttga 300
 gacaggatct ggctctattg ccagggtgg agtgcaatag tgcaatcttg gctcactgca 360
 gcctctgcct cccaggetca aaccatcctc ccacctcagc ctctgagta gctaggacta 420
 caggcgtgta ccaacatgcc catctaattt ttgnattttt ggtanaaatg gggtttcgcc 480
 atgttgccca gactggctgg aactnctggg cttcaagtga accttccacc ttggncttcc 540
 aaagtgctng gattcngact gagccccata cccatcctn 579

<210> 6064

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6064

```

gagacagggt ctactctat taccctggct agagtgcagt ggagcaatca tggctcactg   60
cagccttgac ctcccagcaa tcctctcacc tcagcctcct gagtaactgg gaccacaggt  120
gtatgccacc aagcctggct aatTTTTTTT ttttttgag agacaacgtc tcgctatgtt  180
gccaggtg gtttgaaatc ctggactcaa gcaatcctcc cacctaggcc tcccaaagtg  240
ttgggattat ggggtgtgag cacagcgct agtccagaga tttattgact ttattcactg  300
ccttactttt gtcttggtt tctcttttca aggaaaacaa gggcatctgt tgcctcgtc  360
ctgcttaatt ttgattctcc tcagtgtagg gtcctgacct ggaagattat cctggctggt  420
cagttttgag agttcccagg gactagatgg ctctaactca gctgggtccca accaggtgtt  480
attttattcc ccttcatccc ccttttctca tcccctaagt aacatctggc aatggttaaa  540
aactggtttt tgggtgcaca accaagccat gctttcggn                               580

```

<210> 6065

<211> 599

<212> DNA

<213> Homo sapiens

<400> 6065

```

gtagagacag gtcctcattt tgttgccagg ctgatctcaa actgcaggcc tcaagggatc   60
gtcctgcctc agtgctggga ctacagggtg gagccactgn gccagcccg tacacttttt  120
aaaaaactta attcttcaaa ttcacgaata ataattctac atattcgtgg ggtagaatac  180
tttgatacaa agaatgtaca gttatcagct cagggttaaca agcatatcca tcactcaaa  240
cacctataat ttctttgtgt tgggaacatt caatattctt ctatttttaa gtatatatta  300
actatagtca tgctatagtg gtacacaaca ctagggtta ttcctatggt atttgcatc  360
ctcccacaaa tctctcccta tcccttcctt cccctatct tctcagcctc tagtatgcgc  420

```

tgtcctaatt tttacttcta taagattaac tttttaaaac ttccacatga gtgngaacat 480
gcattgntta attttccatt ggtggcttat ttcacctact ataaaggnc t ncagntcctt 540
tccatgttgg ctncaaaatg aaanggacat tcttttttta atggctggaa tagaatccc 599

<210> 6066

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6066

atgaaaaatc caaagtttat tgcaaattgt attttgcttc ccttcgttct tcatttttac 60
aggatttatt gatatccatg attttttcac agatgtactt gttgactttg gagagtctct 120
gtgcaatttc agtttcatcc acagtttctt gtgctattct gtcatacaaa cactctctga 180
cgatgccttag tttgcgaggc gagaggggtg gtttagggac tgcactcttc tttttttttg 240
tggcgacgcc tgtgacgctt ctgtttttca gaacatctgt tccccaaatc ataactgcca 300
agttcttctg gtacttggaa tctccttggg ttacttgtag ctggtgccat ttctcctcat 360
caacccaaat cccgcttccc agatggacct tgccattgtc taggatatac ttgtccatga 420
caggcgagg agcggggtaa taggacgacg tatttgcttc ctactgaaa gtgctccgta 480
acttccggct cggctcgaga cattctgact ttactttttc cagacaatgg cgggaccgtt 540
gccaanctta agaaccagca cgtcttggan cctccggtta g 581

<210> 6067

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6067

atctctgccca ggttttggtta tcaggatgat gctggcctca taaaaagagt taaggaggaa 60
tcccttcttt tcaattgttt ggaatagttt cagtagaaat ggtaccagct cttttttgta 120

cctctggtag aattcagctg taaatttgtc tggtcctggg cttttttttt tttttttttt 180
 ttttttttgg agactattac tgcctcaatt tcanaagtcg ttatttgtct attcaaggat 240
 tcaatttctt ccaggttcag ccttaggagg gtgtatgttt ccagaaattt attctctttt 300
 tctanatttt ctagtttatg tgcagagagg ngtttataat attctctgat ggttgcttgn 360
 atttctgngg ggtcagtggg gatataccct ttatcatttc tgatttgtgt ggattcttct 420
 ctcttttctt ctttattagt ctagtttagca gncattaat tttttttcaa aaaaccagct 480
 cctggatttg gtaatttttg aaagattttt tggggctctg gctccttgag ttctgctctg 540
 gncctaattc tggaancngc tactttgggg ttgggttttg g 581

<210> 6068

<211> 348

<212> DNA

<213> Homo sapiens

<400> 6068

gccacagcca gaaaaattta ttttaaaata gaaacataca ttaagcttta aaacaaccaa 60
 ctnttaaaca aaagaggaaa gagcctttga tcccagagtc catgcggaat gaattccata 120
 cgtgtttgaa attcacataa ggngcactta naaaaccacc tgaaatggaa atccaacagc 180
 ccccttgcct gtgagggtcn ccacccctgc ccgcgtgagg acatggccga accccggaca 240
 ctctgtgtgcc gggagccacc acagntnaag gngaccggca gcacccanct ntgtgaccaa 300
 nacagatgtt cacacgtggg ggcatngtaa gcgctaccag ctccaaat 348

<210> 6069

<211> 579

<212> DNA

<213> Homo sapiens

<400> 6069

cttttttttt ttgagacaga gtctcactct gttgcctagg ctggagtgca gtggctccat 60

ctcggctcac tgcaacctct gcctcccagg ttcaagcagt tctcctgcct cagcctcctg 120
 agtagctagg attacaggca tgagccacca cgcctggcta atttttgtat ttttagtaga 180
 gatgggggtt caccatgttg gtcaggctgg tctcgaactc ctgacctcgt gatccgcccg 240
 cctcggcctc ccaaagtgtt gggattacag gcatgagcca ccatacctgg cctctatctt 300
 ataacaagtc acttccctca acatatcaag attaccagta tgaagggcag ttacttaatt 360
 cctaatttcc tacaatgtta aagacatttt cctctttact tacagaattt aaggtactca 420
 tattttcttg gttctaaaca attaacacag aaataaaaaat aaactgaaat atgttttttc 480
 tttttataga ctgggttttg ctctgcaccc aggctggaat gcatggtggt gacacagntt 540
 cctgnagcct tgaatnctag gagntnaagc aatcttctg 579

<210> 6070

<211> 561

<212> DNA

<213> Homo sapiens

<400> 6070

ctggtgccta ccaaggtgag gtctttatgg tgtatagagg ttggtgagtt tcagagccag 60
 tgtggccagt ctagtccctc ccttttccct agcccagcac aattccctcc attgagggcc 120
 cacatcacct ccagagggag gagggagggg tcagaccccc ccatagcacc aatctggata 180
 ggccactctc tgacaaaaca gagcgagcag tgccttcac aaacggggta aatggggcta 240
 agaagggggg aggccttttc ctgtgggaga ccaagagtag caccatctgt agaaagaaag 300
 ctggggggta agggaggcac atagatggtg gcagacagct gaggggtcct ggcttctctc 360
 cccacctggc aatatgcaga cagcacctgt cctgtgcatg tgcctgtgtg gctggagaag 420
 tcttcagatt gcaaaccacc caaggggtga gggagcccca ggtgccccaa acatgtgggg 480
 taaagtcaag gtaagtgcag gtcttggagg gctgggggtg ggaatggaag gggntctggg 540
 cncaaanatt gtnngnatg a 561

<210> 6071

<211> 586

<212> DNA

<213> Homo sapiens

<400> 6071

```

ggtttcaaca gtactttgtt tccagaacaa agaaatgttt ctaaccacat cttgtacccc 60
ttctcatca actccagact accacagacc tttttccaaa actgtgtgtc acacatccag 120
gtcttgtgct ttagagctgc ctctcaggca attttagcca gccatttctc caagtcctgg 180
atgtcagcag agcccacgtc cctctttcca cccttggcac tgcactccag gaactccact 240
ttgaggggca actgtgagaa ttcaaactct ttgcctttct tccccagctg agcaggggca 300
gtgctggaac tgtccagtgt gctgggggca gcagaacggg taactcgtaa ggtgttgagt 360
tctttctcca gctgctgttg aattaacttt gctgattttg ccattgcaat atcttgctta 420
ttgcaggcta ttaagaatga tgggtgtattc ttcagacca tactgtcaat gaggacttga 480
tacagaaact cagccacatc ttccacctct cgctggaatg ctgcactatn cacaacaaac 540
caataccctg gtgaagactt aaaccggtct aagactgaag cctcaa 586

```

<210> 6072

<211> 560

<212> DNA

<213> Homo sapiens

<400> 6072

```

cgctgttcca aagttaatt aaaaacacaa ttacaaata tttaatatct tctgaaaagc 60
atttctaagt taagaatgaa aaagtatgta cataatatat aatcaaatac caggcagcct 120
caacttccac caggtccaca ctccagcaaca tccgtctttt taggttcttc agtgtcttct 180
gtcaaatacca caaagttgtt ttccatgacg ggggaaggaa tggaaatccc cattgctttt 240
cgaactccat acgtgcttac gatatacct ggagttactt gctgtgcaag ttctttaaga 300
ttattgggtca cttgttcagc aagatgcatt tctctgtatg agggacccaa gagacagatc 360
atgttcggag ggggtctggt gctcaaactg tcattctggg cttcctggag ttccctgagc 420
aatctgggtg tctcatcaag tttcttctgg aatatttcag cttcttcaga gtcaaaaact 480

```

tcaactggna cgccaaaatt tgggtactggt ttcancgctn tgancctgnc ttgagaccgg 540
agtcenaacg ccctggnggg 560

<210> 6073

<211> 544

<212> DNA

<213> Homo sapiens

<400> 6073

gcttttaaaaa ccacacagta ggatttttgt gaacataaag aggttcaagg gacactcagg 60
agagaaaata agagcttaaa gacaaaggcc aattccatgt aattgaaacc atatctagtc 120
acaagtacat ttgaaatgct gcaaaaaaaaa atgtttttgc aggtgaataa atgtccagtc 180
ctctagtttg gaattctgtt taactcactg tcaggcaggg caggaaacaa ggtcactctg 240
ctttttttct ctgtcaacac ttiggaggga ggatggagaa gaatatactt cagtgtttct 300
tctccagtgg gagagccctt ccctcagtgg tttagaagc cctctctcaa cggggactct 360
tcattagcac ctgctacggc ctgagctacg tgcaccctta tctcttactg agccagttac 420
acaggggcat gactgaggcc atgtgaaaat ataattaaac gttggtaaaa attcacagaa 480
tgntaaatcc cccanttnaa ggctgnacgc gcgcaaaaag nanaaacncc cggcttacca 540
aacc 544

<210> 6074

<211> 560

<212> DNA

<213> Homo sapiens

<400> 6074

acagtttcag gttttatatt taagttctta atctgttttt agctgatttt ttgacatgg 60
cataagataa gcgtcaattt tcattcttct gcgtgtggat atctggtatt ctcaacacca 120
tttattgaag agattgtcct ttccctatatt tgtgttcctc acctttgtca taaataaggt 180

gactataaag gtgtggggtt atttcttcgt tttctatcct ctcctattga ttgatgtgtc 240
 tgcttttatg ctagtatcgt gcagtttgat tataattgct tcataatggt tttaaatcag 300
 ggggcatgat gcttccagac ttcttcattc tgctcaagac tgttttggct atttggtatc 360
 ttttatgatt ccatatggat ttaagctgta gattgctttg ggtagtatga acacctgtcc 420
 aacattttatt ctccaatct ataaacacgg gatatctttc cattttattg ggntttcttc 480
 actttatttc atcagtggtt tatagctttc agaaaccaag nttttancct ccttgggtaa 540
 antaaaccta nggatttaaa 560

<210> 6075

<211> 518

<212> DNA

<213> Homo sapiens

<400> 6075

ccagacttca atcaacattt taattaccaa gtctatattt agcaagacaa tgtgggagag 60
 ataaagagga aggaaggggt aggtggggag gggttctcaa aggagctgac ccattttctg 120
 cattggctgc agagccttgc agtcctggcc aggagttctt ggccttgtgc ctttcanaag 180
 tgccgacagg catcaaggag gtacttacgc agctacagct cagtggcagc tgcaaacccc 240
 atctacgaaa catgtcatca ggactgncct ttaatagtct tcctcctctc tgcagctgcg 300
 ggaaagagga ctggccaaga atttcaggtg gggtcagtgt gactgcaggg tcaccgcaac 360
 agctttggct gtggcggtga ggacgggtggg gggaagccga gcagcaggga ncatggcagg 420
 gatgtctctg gggaccctct ggatggggccg gatgttgggg cccttcantg gtgnccagga 480
 tcccctntac cacttttggg gtaggcaaaa nncnnatt 518

<210> 6076

<211> 564

<212> DNA

<213> Homo sapiens

<400> 6076

```
aagcaggaga tgctttatit cagaacaagg tacaataggc cacacctctg tcctgcacct 60
gggaaccttg ggcatggatg agcagagcaa ccacaggtct gaagagacaa agcagaggaa 120
gcctgagcgt gcttctcccc tgtgtggagg ggcaggccgc cattgttgtg gtgtggctcc 180
tttcatctcc tcagctgtcc agggactagg gtatgaaggg acaagaaaac caggcccaat 240
atcctctaaa attaagctga ggcaggagag ggacacccaa ggcaagggtg acaggccttt 300
cttgttggct ggagagccag tctccggccg gattctggtg ccaacggcaa aggaaggcct 360
tcttctcccc cttggatgtg accagacacg tgcccagagc tgcctgctca tgggtgggtt 420
tcctgcgttg gggcagtctc aactactggt cccacagaag aagtcttcag gaagctcact 480
taggagtnca ttcanggcatt tgnittctngg aagtctttct taagggaacnc ttttgcttta 540
ggtctgggct gttttnaacc ttcn 564
```

<210> 6077

<211> 565

<212> DNA

<213> Homo sapiens

<400> 6077

```
ataacacttg aaagtataaa atgctacatt tccaaaaata tatatatitit tttctgcacc 60
agcacccttg tatagtaaaa gtatctactt tttgttcatt tgtttcaatg cactacactt 120
tatctacaat ttcattacat gtatacagca aataggcaag catggctitit acatccttaa 180
tgatititit ctatacaggg aggtitaaaa aaaaatactt gaacagtittg cccagtaatg 240
tgacacataa tgcattgtacc ttgttctcat atititittag gtgtaaaaata aagattcagt 300
aatititaaact cagatatitit tctitititaaa aatagtgttg cagtittgtt atttgcatta 360
ctititcaaaa ctcttaagt ttttctctca tgggcacact ttcttctaatt actitcaaat 420
ttggcaggca atataaaaaa ngctgcaact tctgccctit gagggcactg tagtgactaa 480
acagcatatc aaatttgnat cttititgnaa tcatttcacc aatgggtatcc tggncnaaag 540
gtcatgcntg gagcattatc cccca 565
```

<210> 6078

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6078

```

attttagaga taggatctct ctatgttgcc caggctgcat ttgaactcct gggttcaaag   60
tgatcttcct gcttcagcct cccaagtagc ttggactaca gatacatagc accatgccgg   120
gcaagtctat ttgttcttta atatatcggt tagctgttca agacctttct gttcctgtgg   180
cactttgcct tcattttatt atactgtcat ttattagcat tgattacttt tactactagt   240
tcctcaaatg tttgggaag ctatacctta ttctctaaga cattagttgc tgtgacagat   300
acatccagat gtttgcctgt caaaccttac aatgtataga gttcatagcc ctacctactg   360
cttctgcaaa gttctagaac ttatttcctc agaattatgt ctctaaactc ctaaatatgc   420
ctgtgtctta cagttccatc ccatacctang ccagtgaag angaagaaca gactcttnca   480
ctgggttcac aaaaaacttg gcttggagcc caatcttgat aaaggctgca ngggtctana   540
nangagtcac aggcaaggtg ct                                           562

```

<210> 6079

<211> 472

<212> DNA

<213> Homo sapiens

<400> 6079

```

ctaacagatg cagagccaca gtcaccaacg tgtggaattt ctataggaac agataaagag   60
actaaaacat gcaaaaatat atggcaattt gttgtgcaca taagataatc aggggagaaa   120
aggcaaatgt gtttaataaa tggtaatggg acaaaactgac tagtatttcc atttggaaaa   180
aaattaatgt agcattcagg gaaaaaaaaaac ttcccagcca ggcgtggtgg ctcatgcctg   240
taatcccaac actttgggat gccaaaggcag gtagatcact ttaggtcagg cgttcaagac   300
cagcctggcc aacatggtga aaccccatct ctactaaaaa tacaaaaatt agctgggcat   360

```

ggtggcatgt gcctgtagtc ccagctaccc agggactgag gcatgagaac tgcttgaacc 420
tgggaggtgg agattgcagt gagccaanaa tnggccnntt gnactncanc ct 472

<210> 6080

<211> 356

<212> DNA

<213> Homo sapiens

<400> 6080

cggtagtttc ccaagtttat tgtaagtgg ttttaagttaa gtctcatcca aacaagttat 60
cacacagcac ttaaccaagc cctgggattt actgtcttga tgactacacg gctttgcaca 120
gtctgagatg cttcagtgtg caaggcagca gctggggggg aggagggggg tcttcacagg 180
gacagctggc aagagacttc ctgaggcaca tcagctacgt tggncaat t agggcacggn 240
ctggttctgc anctttgaaa ggnggattct ttctattagc acactttaca agagggattg 300
naaaggatta actcagtcac canaancgaa acaccacttc anaaattcan anacct 356

<210> 6081

<211> 569

<212> DNA

<213> Homo sapiens

<400> 6081

gtggcaagac aacttgtaat tacctgttga agcattttta tgagagttgc ttaaaatcct 60
tgtcaagtaa ttccaacatc tgatttgtct cagtgttgtc atctgttgac tgtcatttct 120
tattcaagtt gtgatttttc tggttcttgg tatgacaggc tattttacat cgtatcctga 180
accttttgtc tattatttta atcttttatt tttagtaggc agtcactcca tttgtgttta 240
gcatgcaagc cctggccttag tttttgtggg ctatgagtc agtggttaatt tagtttttaa 300
agcctttgca gtgttatttt ggtctgcttg gtttatctgg tgctgctggg gttcccgaat 360
ggtccttcat gatgctactt tagggaaaga aggattttct cccaagccag gtcccatggt 420

atctctggga gaagggagtc tcaggctcan ggtaataaaa aatcttinctg gggtagaatg 480
 ctttttggcn aaaggccctg gatgcctaata tttttaaccc caaagaccaa gnttaaggct 540
 tggatgtttg gcaatgggga ttcctgatt 569

<210> 6082

<211> 524

<212> DNA

<213> Homo sapiens

<400> 6082

aacatttatt atgattattt tatttaaaaa aaaagcccca catctccggg caataaacta 60
 caatacagta aaaagtagca tctgggtgta agacactctg ccgacaggct gcatgccttc 120
 agtgtcggca aaggctctgc acagacatcc acagtattcc aactgcctc cccatttca 180
 gaagtccta ctgaaatgag aaggacactg aggcacacag gggaagagaa tggcctgagg 240
 ttagactgcc acgaaaggca cgtgggaact gggcccagaa aattccaacc gttccataca 300
 aaatgctacc cagcagggaa aaagagtcac ttcttcttcc aagtgaccag taatgccaca 360
 ctcatggggc agcaagaagg gtggcaaggg aaccaagccc tgacctgagc ccagtgatca 420
 ggccagagcc caccaatggg actngccaca ggtccaggct anccccctnc ttcaccgat 480
 tggcctantt cnaaaccaan ctttcttngg gaaaaccatt tgca 524

<210> 6083

<211> 556

<212> DNA

<213> Homo sapiens

<400> 6083

aatggtctaa atattctctt acttattaaa gataggaagg aaataacttaa ctagtactgc 60
 attctgtgta tgtatgtgca tgtatatttg tgtgtgtgtg tatgcaagct cacagctgtc 120
 tgctgcatgt agcatcttgg aatatatctg caagataaga gaggtgctgt taaaatgttc 180

tcataattcta caggtgaaaa acaagggtg cattatTTTT aaactcatca accattcacc 240
 cccctcgccc tagcaggctc gggaaaaaaaa caaacccaag atttatttca atgagaaaaa 300
 aaacacaaaa cactattatg ccaaaccact gctaatttag aggaccaaaa ggacatgact 360
 agatgaaata catgccgaaa atttttgagc agtgctgaag ggcgttctcg taacatatac 420
 ctactttgca tggttgtagg ctccaatctc ttccagtaat acgctgtcgt tcaaagagaa 480
 agggctggct ttggccnaac ttttagtcca tggccngttt anangcccca agaatactg 540
 ggnagttttg gnaggg 556

<210> 6084

<211> 551

<212> DNA

<213> Homo sapiens

<400> 6084

aataatggaa aagcttgttt tattgtaaaa attaccagta tgngacacag agacaagaag 60
 caagcagatg ccattggaaa aatggtgccca gtagacttgc ttgttgcagg gttgccacaa 120
 accttcagtt aaaaaaaaaa aaaagaagca atttctgcta agcacaatga aacaatgtat 180
 gcctgtgcgt atggaggggc atgggggaaat ttgggaggtg atgaaaatat tatcttgatt 240
 tcacgagtgt atgcaggtca nattcattat acatcactga tatttcaaag ctgtaagaaa 300
 aaacaaaanc aagattgatt gtgtgaaaag atgttcagca ttattaatca ttataaagac 360
 ttgaaatgnt ttatttctat tcttgnctat tcaacttatt tgggataaaa gtggagaata 420
 gttttcctta tcctaaattc acagcttgca caggcaactg aaatgctntc atgcgtttgg 480
 acccnatgga cactanctgg gtaaaccggt ccggaaccg tttaccngtt aacttgantt 540
 accactttta n 551

<210> 6085

<211> 528

<212> DNA

<213> Homo sapiens

<400> 6085

```
gaggtagggt cttgtgctat caccaggct ggggtgcagt ggtgtcatca tatctcactg 60
caacctcgag ctctgggct caagtgatcc tccacctca gcctcctgag tagctgggac 120
tacagggtgtg catcaccatg cccagctatt ttttaaaaaa agatttcttg tagagatggg 180
gtctcgttat gttatccagg ctggctctga actcctgcct caagcaacct tcctgtctct 240
gcttcccaaa atgctgggac tatagatgtg agccaaaacg cttggcagtg gccattcttt 300
tggtttaaat cttgccttcg ttgtactaga atataatcca tctgatagga atgaatttga 360
ctattttatg tatcttcaag tccacagcct ctggcataaa gccagatgct tacagaaagc 420
ttaataaata ggtattaaaa tggtttttaa aanggctggt anaaactgga ctggacttaa 480
attacctagn ttaagctttt gggaanggga aatgccttaa aaancncn 528
```

<210> 6086

<211> 561

<212> DNA

<213> Homo sapiens

<400> 6086

```
gagtgggagt ctggctctgt cgcccaggct ggagtgcagt ggcacaatct cggctcactg 60
caagegccgc ctcccagggt cagccattc tcctgcctca gcctcccag tagctgggac 120
tacaggcgcc caccaccaca cccagctaat tttttgtatt tttagtagag acggggtttc 180
accatgttag ccaggatagt ctctaactcc tgacctcatg atccgcccgc ctcgacctcc 240
caaagtgctg ggattacagg catgagccac tgcgcctggc cgggtacttga ttagattcta 300
attccagaga agatattggt tagtataaac tggttagtta taaacctacc acatatatat 360
tgaaaaaatt accctgcgta attcagatta atttcataac tttataataa gcatttaaaa 420
ttttttttcc tttaatgcag gcattacaag gagccagtca aattattgct gaaatccgga 480
gactcattnt tggngaaaaa aacntttgna nnnttggaaa cttgttgcct caaaacttgc 540
tagttactgc ctacctgagt a 561
```

<210> 6087

<211> 520

<212> DNA

<213> Homo sapiens

<400> 6087

```
gagatgtagt ttcgctcggt gccagggctg gaggcaatg gcacaatctt ggctcaccgc 60
aacttccgcc tcctgagttc aaatgattct cctgcctcaa cctcccaagt agctggaatc 120
acaggcatgc accaccatgc ccagctaatt tttgtatatt ttagtagaga cgggggtttc 180
tccacgttgg tcacgtgggt ctggaactcc cgacctcagg tgatctgcct gcctgggcct 240
cccaagggtgc tgggattaca gacgtgagcc accgcaccca gcctcttaat tcttaatggg 300
gccaaataat cctttccctc cgaaatataa aaccaggaca agagaaaaat gtgagttctc 360
tcaccaccta ttccactac ctccccctt cagaggccaa gtttggcttg catgtgatga 420
tccctgctgc tctgtgctgc tctacccat cttcactgac ccaacagaan gnggcgcttt 480
taatattatg cctnctttga nacctgntan ctgncaatac 520
```

<210> 6088

<211> 526

<212> DNA

<213> Homo sapiens

<400> 6088

```
gagatggagt ttcgctcatc acccaggctg gaggtagtg gtgcaatctc ggctcactgc 60
aacctccgcc tcctgggttc aagcaattct cctgtcttag cctcccaagt agctgggatt 120
aagggtgatg ccaccacgcc cagctaattt tttgtattta gtggagatgg gatttcacca 180
tgttggtcag gctggtctgg aactcctgac ctcaggatg ccacctgcct aggcctccca 240
aagtgtctggg attacaggcg tgagctactg cgcccgacct caaaaattct taatacctgt 300
tgcacacaag ttttatgaa aattggcact tccattacaa caccgttctg tgggtgcaga 360
ggacaccatt ttcaagagca atttcacagc atctaactga aacgaaactg atgatccaac 420
```

aatgccacag ctagacattt atcctgnaga attaggagac caactgnatt agaatatntn 480
tattgggcac atttttgcng gnaccaaacc aaccaaaccn ttaacc 526

<210> 6089

<211> 577

<212> DNA

<213> Homo sapiens

<400> 6089

atgtgcaatc aaatttatta atcagtagaa aaacaacatg tattcaattt aatgntaatc 60
cacaaatagc tcttggtcag atttatgaaa gtctgtgtaa gttagaacac aattttacat 120
ttttttctct aagcaatatg caaaagataa caatatttaa ctacaaatat ataaacaatt 180
ttagtattat actaaggatt gtacttgaag aagttacaat gtaatggaaa taataactta 240
ccatattaca ggtctcaaca ctatcatgtt ggcccctatt cagagactgt gcagcgtaca 300
caattagtgc agcagcagtt cttggtataa tatatgacaa ccaagtttac tggttaagctt 360
gaaaataatt cttatgtaaa aattagagat tttatgaatt tctgatgggt cagtaatttt 420
ttttcagaaa tggtatttca gtcacttaat ctgnccttct atccatattc cacaggctctg 480
ngagttaacc tcatccaatt gctgatgagt cttctcctag gttgcaattt cttcttaate 540
ctttacaagc tcctttttct ctncctagcac tggngac 577

<210> 6090

<211> 589

<212> DNA

<213> Homo sapiens

<400> 6090

gagacagagt ttcgcacttg tcaccaaggc tggagtataa tggcgcgatc tcggctcact 60
gcaacctctg cctcccaggt tcaagcgatt atcctgcctc agccccccga gtagctggaa 120
ttacaggtgc ccgccacat gccagctaa tttttgtatt tttagtagag acgggtttca 180

ctgtgttggc caggctggtc ttgaactcct gacctcaaga cccgcctgcc ttggcctccc 240
 aaagtgctgg gattacagct gtgagccacc gtgccaggtc tagatcatat tttaaaataa 300
 ggaactatta aaaatatgta tgccaaattt acatggatta tttaaagta aagtattaaa 360
 ttaacaagaa atttgtttca aaataggaaa ttcagttttc tgatccacca tctgggatgg 420
 agccacaagc aacaggcaga ttttcataaa agtccttaca ggaagagcac cactctcaag 480
 ggtgaaccct tggacacaac agaaaatncc aangcccaga tccngaataa agaaggaatt 540
 tctnctgaca acaganactg actttgtggc agcactggaa aaagacatn 589

<210> 6091

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6091

gagatggagt ctcggtcgcc caggctgaag tgcaagggtg cgatctcggc tcaactgcaat 60
 gtctgccttc tgggttcaag tgattctctg cctcccaagt agctgggacc acaggcaccc 120
 accaccacac ccggccaatg tttgtatfff tagtagagat ggggtttcac catcttggcc 180
 aggctggctc tgaacctctg acctcgtgat ccacctcct cgccctccca aagtgctggg 240
 atcacaggcg tgagccactg cgcctggcct ttaaaaaaat ttttttttag acatgaggtc 300
 tcattatgtt gtccaggctg gtcttaagct cctgggctca agcgatcctc ccacctcagc 360
 ctcccaaagt tctgggatta caggcgtgag caaccgtaac atgaggtccc agcttcatgt 420
 tcattttttg ttgttgctac aacaaagtac cctacattta gtggcatcaa acaccacaaa 480
 tctaccatct tacaagttct nggggccaga agcccaacta nggctattaa ggttaaggca 540
 aggtgtcana aaagcttcan tncntttggg ggangcttta aaaaaatg 588

<210> 6092

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6092

gagattatgg ggggtgggtgg cttttggggag ggagaagcgg gggagttgaa aaacttctca 60
 agtgtccact ctgtttttga gacagtaatt aggattcaga aagctcctta ttaatagctc 120
 ataatttggg ggggcacttc agggactcca attacaaagt tcaaaataaa tcaactgcacg 180
 tccccctccc cctcccccaa aaaaagaaaa aaggactaat tttagataac agaaatcatt 240
 ctacaaagaa ctggattatg agggggcaag ggagtaatag ccaccagggtt ataaggaacc 300
 ctaaaacatc acagaaaagt tcaactgactt agggaggccca agatgcaagc tccagtaaca 360
 acataaagct gctcaaatgc cttctgaaag catagacgct gttgtcttca gtgggggtgt 420
 tnggggggttn ggcggttatt caagtctggc tctgatggcc tttctttccc gctggttctc 480
 cactagggtt cangctgngc tcttgaggaa aggccttcac catgagtcta tctggatagn 540
 atctttggtc tncaaaccct ctagaaatnt gantgngtcc ccc 583

<210> 6093

<211> 561

<212> DNA

<213> Homo sapiens

<400> 6093

agtagagaca gggctcttga atgctgccta ggctgggtctt aaactcctgg cctcaagaga 60
 gcctcctgcc tctttttttc ctttttaaat aagaactatc actgttttct tctccttctc 120
 tttttttttt ttttttctct agcaactatt gccaccctgg ccccaaaagt tatttataga 180
 gtacattggt agtaattata cttacaattt agtccatgga gtgcaggacc atgaggaact 240
 atagctagat aagattgtgc cagaattaga agaatagaca ttttactttc agagaccatg 300
 actaaaagaa tattaacacc aagatgctcc ttccatcagc tggatgtacc tttgggcttg 360
 gaaagatggc aagtatagga gttgtactgg aacggctgga tcaaataagg tgaaggcatt 420
 tttgtcattg tncatgtggg gaaaagcaac caagtaataa gacacaacag atatctctta 480
 aggcccgcac agntcacagn gaccctcctt cccagacaac gtaangngg acagtnccaa 540
 attttntccc ctaactgggn a 561

<210> 6094

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6094

```

gaaaagagaa gtcatgtcat tattaatac ctcactatag ngcaaatagt anaaatttcc 60
aaggaatctc ggagatattt aagccaactc attttacagg ngaatgacct gacacccaga 120
caaggngaaa tgacatgcct aaaagtcaca caggagagct agaagagaaa aaaagcattt 180
ttttttccca aaacaagcag acaggatttt tcatgttaat caaaaagaat caagatcatc 240
agattaggaa gaaatgagga ataaaacata cgttacacac agattttaag aactagtcag 300
tctgctgccc ccaaaaccaa aaccttctnt aaacatatgg acatatatcc atcaagatgc 360
ttacccttca aatatcagaa tcttggaata ttcaatttac aaatacatta attgcattat 420
gatgatgaaa taagttaatt aaatgtgaaa acatcaaaca gcaccaatcc tagaagttaa 480
gacaggaaat ncncattat ttaaaatagt cncgtgattg ggacagaatg gaccattacc 540
ccttgccaaa ccttttaaaa aacttttttg cctaaagg 578

```

<210> 6095

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6095

```

agtttttaaa aaatgctcct caatgagatt gtgttcaatt ttttttcagc attcttgcaa 60
cttttccctt aagtatagac ctgtaaactg ggaaaattgt acagtgcact taattgtcct 120
atctgagcag gtttatttta tactcaacct ctgtatctct gattagagaa aagatacaga 180
tatcacaggc agagtcaagt gctatttgaa caccaactgg ggcagatgct agcttaataa 240
aaaagaaaaa attaaaaaaa taaaaataaa aacaatgaat cctcttccat gttaacacaa 300

```

atagcacaca gtgtatggaa aagaaatgaa gtacaacttt tagggagcac agacatatat 360
 actgctactc ttaaaattct ttctcttctt tttttaagaa tgtcacattt aaatgcaagt 420
 cttagaatt catagttaat catcattgta tcaatattag cttatatacc tgnctagtt 480
 ttaaattggca aatagtccca cggtgngcta ataaatcata ttaatttctt ctggtcctn 540
 tggcaaacc ctttgggagc ncttccttta aaangggttc canggctn 588

<210> 6096

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6096

gagacagagt ttcactcttg ttgcccaggc tggagtgcaa tgggtgtgttc tcggctcact 60
 gcaacctccg cctcccaggc tcgggtgatt ctctgcctc agcctcccga gtagctggga 120
 ttacaggtgt atgctaccac acccagctaa ttttgtattt ttagtagaga tggggtttca 180
 ccatgttggc caggctggc tcgaagccct gacctcaggc aatctacca cctcggcctc 240
 ccaacgtgct gggattacag gcatgaacca ccacaccgg cctctacttc ttcttttgag 300
 aaatgtctgt tcagatcctt tgcccatttt aaaatcacat tatcattatt attttgctgc 360
 tgaattgagt tccttgata ttccggatat acaagtcct tgaagatga atagtttgca 420
 gatagttcct gcattcaaca ggtnggctct tggctgatg gtnccttgct gggcaaaacc 480
 tttttagttt gaaatcgncg gcttggcnat ttttgngcc cgggcttttg agggcttcac 540
 atccaatttt gcccaaataa gggccnaag gttncctttt c 581

<210> 6097

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6097

ccacaaagaa cttgggattc tttggcctta ctggagtttt gttatagcta acaccagtct 60
gtattaatta agaaggcact attaatgagg gacggaaaaa tctacctgta cacaaaattc 120
tgtactttta cagcatcttc aaataaacct ttaaaggata atggtttacg atcattttta 180
gcattttaag aactgagtta tttggacaag aaccatacaa acctttttca ctctgccatg 240
aatgatcgaa gaatcctgct ctaggactgg atcttttcag agaaaataac ttatcacctg 300
ttttactgca gttgctacta gcaattatta tatagcatgt gctcttcaaa acagaaataa 360
aaattgatgt gtgaaatccc tttcattggt tttggtaaac catccaattt tgggctgtca 420
tttcaattat aatacagttg tattttaaga gagaagataa tccaatataa caaaggcttg 480
ataaatattg ncactctgta atcaggacat actaaactgn aattcaacga atttccaaga 540
acttttcagg ttttggncce caggganaaa tcttgggttt gccaaaaaan g 591

<210> 6098

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6098

gaattttcta aatcctaaat aactgaaagg tacatccaaa tgtctgatat ataaatacac 60
aaatatattc cttatatata aaccaaccaa gagctagggc aggaagagaa agagcgaagc 120
tgtcctgtgt tcacactaat gtccgtgttt tacaaggatga cagggtgtgtg agcaccagga 180
aggatacatg atatccatga tagtggcctg atagctatga cacttgaaca cagtgaagaa 240
agtgcagggc acagggccaa gaaggaaatc tgaggagaga gaggtcacct tgggacttga 300
gtaatggata cttcagactg gctgttttca ctctaaaccc tgggggttac gcttcctcag 360
catgctgcct gtatatgctt tatcggtgct gatgcccaac cttcatctt taaagtcttg 420
ggaccactct tctttggtgg tttcctcttg ctcagggtag ctatctgcac tgaatccagc 480
attctctgcc aagacagcag ggatcctcgn cttcatgaaa accgcaggaa catggttctg 540
gctttggatc acacgangta accgaattat cttcctgggt tttgggg 587

<210> 6099

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6099

```

acgaacatat tgctttatctt cttggttagta aattaaggct ttctagattc atacagcacg 60
cagtgatcttg aacatttagaa ttaaaaaaca acaacaacaa acaatgagca ttcaatttag 120
cagagccagg aaggaagcaa tgcttttaaaa cagataaatt tcctagttag accttttggtt 180
tggtctccaa aaatctgctg agctgtttcc ccagtaacct ccatcataga ttcccacccc 240
aaggagagaac agaattgatg aacaggagac tgggagaaaa gaagaaactg gcaagacggt 300
atgtgctggg caatcagtgt gaacagtcag ctttgtctca tgtttggaag acagtttagg 360
tgatgcggtc agggattcat tctctggatc tccctgctca ttctcagagt attaaaccag 420
ctcactcgga agaccccagg gccaaaggatt aagggacaat cttttgtgac acccaaattcc 480
tgaaacttca aataggggtc caagtcacag agctgaggaa tgctggcttt aacttcttta 540
tgggtttaac tctgggggtt tncctanac ngggctactt aaaggat 587

```

<210> 6100

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6100

```

aaaaattatt ttagacacga ggtctcgctt tttgcacggg ctggtctcaa actcctagcc 60
tcaaacgata ttcccagctc atcctcccaa agtgctggga tcacaggtgt gagctacggc 120
accagcctg tttgttttga atataatgta ggatgaagaa aaatcaagcc tttggtggtc 180
cgtgtctctc caaagggtga gtggagaagc gtatggtgag aggcccttgg tggccatgga 240
catcaggcca cacaagccac agagggttg tggagatgct tatggctggg aacagactag 300
gaacaaacac ggggtgtggt aaagctcaat cgctgagcac tcggtaactc tgcaggaagt 360
taaaactttc acaacgacca tccatgtggt tgactgggac atacaggcag agctccttct 420

```

ggaaaatgga tttcttcac tgnittggcca ttttaagtct aatcccaata aagtttggca 480
gcaaatacaga gccaatctt ttatcagggg gctttaagga ttttaacggan ggacatttta 540
atggccttan ggaatgataa tgnentgang gattnctttg 580

<210> 6101

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6101

gagatggagt ctactctgt tgcccaggcc ggagtgcagt ggcgcaatct cagctcactg 60
caagctctgc ctcccgggtt caggccattc tcctgcctca gcctcccaaa tagttgggac 120
tacaggtgcc cgccgccacg gctagctaat tttttttgt attttttagt agagacagtg 180
tttcaccgtc tctactaaag atcaaggatg gtcttgatct cctgacctgg tgatccaccc 240
acctcagcct cccacagtgc tgttgtagg tatcttctaa ggaggagaca atgtctgaga 300
cagggactgt gcagagcctc tgtcttctga agcacagatt gctttggatt tggcaactgc 360
tgtcatttgg gggttgcctt gcttgctgcc ttggtgcttg ttagttttgt tctccatact 420
ctagctccac cttctcagga cactgctgcc ctaacagaag agaccagcag ctcacagagc 480
cttcctgagt tcagcatctt tatgtgcaac tntgcaaacc cttttcttaa gcttntgngt 540
ggatggttgt gggataacct gtggatgaaa cttttt 576

<210> 6102

<211> 577

<212> DNA

<213> Homo sapiens

<400> 6102

gaggcagggt cttgcgctgt caccaggt ggaatgcagt ggcaccatct tggctcactg 60
caacctccac ctcccgggtt caagcgattc tcccacctca gcctctcaag tagctgggac 120

cacaggcacg caccaccatg cccagctaata tttgcattgt ttgtagagac agggttttgc 180
 catgttacct aggctggtct cgaactcctg ggctcaagt atcgccccac ctgagcctct 240
 caaagtgctg gaattagagg cgtgagccac cacgcctggc caaggatctc ttacttcttg 300
 aaattttcta ttggcttcta cagcttcatt tatttatcta cttcagggtc acaaagctct 360
 ggctgntttt ttcttgacct tttatagcct tcttctctgc ctgctcctca aatactgngt 420
 atttctggcc ttggtagact tgnttctatc ttaacacatt ttccctgagt ggtctcatct 480
 acttctaagg gttaatttac cacgtactgg atatctcgag aagctcttat atgaataatt 540
 tgggctcaaa ttttctccca tggcannaat ttttttn 577

<210> 6103

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6103

agntggcttt ctcttttaata caaaaacata ctttgnatca gagttctcaa gaaaggntcg 60
 actatTTTTT agccacagac ttttaaccagg caaaagtata cagaaagcca caaaggaact 120
 cctgggactt tcaactgacc agttgtcccc aaagcanaag ctacgagngg ctcttctctg 180
 gcttctggca tagctgcatt cctctgaatt taggggagga aacagttggg aaataccacc 240
 accaaatntg tccccaaccc ccaactcact tnttctaaac tgggctntgc agcccaccag 300
 gttttcatca tctataagca ttcacacttt tcccttaaat cacatgtcca atgcattgaa 360
 cagaactcaa tacttgaaga aagtttgcca actccatgtt tagtcttaat caatccaagc 420
 ccgnggagtc cttntatcaa tggccagcag cctttgcaac agcagctggg ttcattccctt 480
 cntttcagnt nccccaaagt ggcctttacc agaattccaa nccccaacct taanccagcc 540
 ccaaggaagn ttccaggtct ta 562

<210> 6104

<211> 582

<212> DNA

<213> Homo sapiens

<400> 6104

```

gagtctctga cagaaacaga gctctacaaa ctttctggcg acctcccagg aaaacagaag   60
gaagctgtat cctgtacttc ccctgggatac taatgaaata tacagcctct gggcttcttt  120
caatttggac tttcagatcg ctaagccagt gaaaagggga tcctagctgt cacaaacgtc  180
acatgggtcag ggtcacctgc tgctcggggg ttctcatgcc agttgttgac ataataagcc  240
ccccttacac ttttaattaca attcacagtg tgcaaactat gcaatctgct ttaaggcaga  300
ctgtctttta aatcaacact aaaattctac tactaatatg gcaatgcaat gtagcagagg  360
aagggtgtgt ccacatgact aactatatgc agatatctgc cgtttgggag acagtgggta  420
gcatttgcca aaatataaaa tgggtgttgct gacccaatt ctgggagatg gtacttgaat  480
cttactgngc tctgagactt cttttcatan gccacaaaaa ggnaatgcca tatacctnat  540
gngnagcatt ttacaattgg gtaaccnat ttttttttac aa                        582

```

<210> 6105

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6105

```

gagatgaagt ctcactctgt tgcccaggct ggagtgcagt gcagtgggtg gatcttggct   60
cactgcaaac tccacctcct ggagtcaagt gattctcctg cctcagcctt cagagtagct  120
gggatcatag atgcccgtcc ccatgcctgg ttaatttttg tatttttagt agagacaggg  180
tttcaccatg ttggccaggc tgggtctcgaa cttctgagct caagtgatcc acccaccttg  240
gcctcccaaa gtgctgagat tacagcatga gacacatgc ccagctgtga gcctgtatct  300
taatcaaagt cctgagaata acctgaaga agactccctt gcaatgagca acaacagaag  360
aagcaaggga cctggaatct ggcagacctg ggttcgaatt ctggctctgt cactttctgg  420
tgaagtgact tgagtaatga acatgagcct ttctgggtag cgttacagca caaagcaatt  480
tgaggaataa aatgaaagag cacgtgtcta agtgcctaac aatgcgcttg acacantgcc  540

```

gggccttaanc ttatttnnca cccanncttg anc

573

<210> 6106

<211> 590

<212> DNA

<213> Homo sapiens

<400> 6106

gtatggaaac atttgacttt atttaatat gagacaatac atatagttct gattaagagc	60
atcagaaact ctgaatcaag tgtattcttc ttggtcaaga gcttaataaa agtccctctc	120
ttaaaggctc atcttgatag gaatagaaac aaaagggtac cccatagttc tcttacattt	180
ggaagttagc tatatagagg gtacaaggat attcattttc cttcaggaca aagtcattctc	240
tgtacgccct ttattgttga attgcagttt gatttagggg attagaggtg gtatggtacc	300
agtaattgag taatggtgga aatgtgaaag tcagtcacag gactctcatt ggtgccagtg	360
tcatagttaa gaaagaaaga aagaaagttt tatatacct gtaatctaga ctggaagcta	420
aataattgct aggaagcaaa ctttaagtga agctggtaag ttttttggtt tggttttgac	480
cagagatgat gaagtaggtg gatcttttct tgggttgctn ctaaactctt tcattttaac	540
ctaataattt tagtttgng ccaaaagtaa atgctggttt gggaccttaa	590

<210> 6107

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6107

aaagactata gctaagaaat gaaaagaaaa aataaagtaa ctgatttcct tgggcagcag	60
aattactggg agacaggggt tgtacactaa atattctaaa tgtttctaaa aatgaaaata	120
tattattcaa gagcatgtag tacttgcaaa tgatcaagca ttccaaaaa aaactgccca	180
gccctattaa atttataaaa tatttctgca atacagctgg aataattaca aggtacacaa	240

catattacag tatttgttgt atctattatt tgaattgac tacacactaa catatgaaaa 300
 tacgtgctaa aatttttgga agaaaaggag gtttcctagg acacggagag gggaggtag 360
 gggcgacaac taatgagtat ggcattgctt tgggaggatga ttaaagtgtt ccaatatggc 420
 tgggtgcggt ggctcgcgag gtcaagagat caagaccatc ctgccaacat ggtgaaaccc 480
 cgctctacta aaaatacnaa aaattacccg ggcattggtg caacttttgt agtcccanct 540
 actggggaag cttagccggg aatcccttaa cctngg 576

<210> 6108

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6108

gggtaaagaa aagaagttaa attggctcac ggttccacag gccgtacagg aagcatggct 60
 ggggaggcct caggaagctt aaaatcaggg cacaaggatga agaggaagga ggcacgtcca 120
 catggttgga gcaggaggaa gagagcgaag agggagtgtt acacactttt aaacaaccag 180
 atctcgctaa gaactcacta tcacgacaac agcaaggagc aagtctgccc ccatgatcca 240
 atcacctctc accatgcacc tcctccaata ctaggggatt aaaattcaac atgagatttg 300
 agtggggaca caaatccaaa ccatatcagt gtccatgtct attcctaatt agcttttgac 360
 tttgtactca gcgtattaat ttctgagagc tactgtaaca gtgccaccaa ctgggtaact 420
 gtttgttgta aaacaaacac atcctctcac agttttacaa ctggttggtg taaaaccaat 480
 gcattctctc acagttcttg agctangtgt cttgaaatna aagngtgggc tggacatgct 540
 cctttgaagc cttgaaggaa aatccttggc tggctttt 578

<210> 6109

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6109

```

ctttctttct tctttctttc tttcctttct ttctttctgt cacatatgat agtttaagaa 60
aatagttcac caaaatactg tcttatttgt aaggaagact tcatgatatg aatagctaac 120
tattctgaat ttacatattt tccatcctag tataatgtac aactccatct ctcaaaagtg 180
taaatttttc acattcattc aaaactcctt agagagtaag tagtttcatt cagagttacc 240
tgattgtagc ccaatttacc ttaaagtctt tcttcagaag gaagaaaaca aaaaagtaaa 300
aatcatctct gaacactcct ttaggagata gacttcagtc agccaaagga tagagtagtc 360
accaggagtc ctcagagtcc tcttggtcac ctctctggtt tcatttctgg aaatccttac 420
ttaatctgag gtaacatgct tcctgctgac tggcggatca cacatacacg atattccccc 480
tcagtctgac acacagtccg agtcaataag ctgccagact ggcggnctnt aaagaaactt 540
ntnaaccaag aaccttttca aaacttccta ggnttaacct n 581

```

<210> 6110

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6110

```

ggctgttgag ttgcaggtgt tccttatata ctttgatat taaccctca ttagatacat 60
ggtttgcaaa tattttctcc tattccatag attaccagtt cagtctctta actgttttct 120
ttgctgtgca aaagcttttt aattagatgc agtcctgttt gtctattttt ttaaattgct 180
ttcgtctgtag ctataagttg ttttctgtta agactttggt aaccacaaag aaaataccta 240
tagaagatac acgaaagaaa aaaaaaaaaag gaaggatcaa agcaaaatca acaaatcaca 300
aaggaagaca gcaagagagg acaaaaggga caaaacaact acaagaaaga aaccaattaa 360
caaaatggaa ctagtaagtc tttccctatc aataattact ttaatgtaaa tggagtaaac 420
tcctaataca aaaaacatat agtggctgaa ttaattttaa aaataagatc taactatata 480
ctatctagaa gagactcact ttagatttaa ggncaccagg ctaaaagtga aggaatagga 540
aatntattcc tgccgatgca accaaaganc ccaggtgg 578

```

<210> 6111

<211> 569

<212> DNA

<213> Homo sapiens

<400> 6111

```
ctcattgtaa cactcgtttt tatataaata ttcgcaagtc atgttacaga agaagcccca 60
ccagggaaaa aagtcaacgt tagggttttg ttagattgac ccctgccttc taggttgggc 120
cccagcctgg aggcgctgc tgctttggga aggctgggtg tgctgccgtg aggctgccga 180
agaagctgcc tgtgtcgccc acccctgggc cgacccctt ctttggtgtg tggatcatgg 240
tgaccttctc tggccaccct tagcctgggg cagggttttg gagaacaggg ttcagggaag 300
cagggccag gagtcctggg ggcacttgga aatggggtga aggggactga gccattaaga 360
ggtggtggag tctgagattt agaggctgag ctttggggg tgggggcaga gtgaacggga 420
acatgttggg ggaaccgggg cttgtcagcc aagtaggaac ttctgccctt nccttcagcc 480
caagtccan gtcctggccc ctgtgggcat ttctgntgnn ccacnttcca nggagaaacc 540
tgatgncctt ttccggtttt tcccttgaa 569
```

<210> 6112

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6112

```
cacttgaatt ttaaagttaa tttactttga agtaaccaac ttaaaaaang gcctgagtta 60
agtgtattaa aaagaagaaa tagtcgtaag atggcagtat aaattcatct ctgcatgtan 120
aaaccggana aaaagcaagt tcagtacttc accaaaaaat tattaanatt ggcaaagtnc 180
aagtgtaggg ctgtgactgc anatctggaa gggctgaaag gtagatctat gttcctttaa 240
ctatagtcca ccatgagggc ttcgcaaagn gtgttcccca gtgctgatgg tctgtgaaat 300
ttacttattg cccagntag agaatgatgt gtagttgac caaatacttg ttctaaatat 360
```


attgttggca cggatgtggt gaaaaggga cacttttaca ctgctggtgg aaatgtaaac 420
tagtacaacc actatggaaa acagtgtgga natccttaaa gaactaaaag gtagaactac 480
catttgacca gcaatnctac actagggttn ttcccngagg gaaagaaagt cnttntttga 540
aaaagaatct tgcnccccn tg 562

<210> 6113

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6113

aaaaatgatg aatattttat ttttcagacg tccatatttt aaatgtaata gttttataaa 60
agaaaagggt ggcaacctgt taaggagatc ttcatgtgaa aaatacatgt agaagtttta 120
aaaatttgtg gatataattg tcattcagaa ttaagcaggt tgattgctgt tatctagatg 180
ggtctcttcc tttatgtttt tcagtcacat aatcttgatt tccatagtta tcacatgtac 240
ttaaagaagt taatcaatgc ctatatgggc caaggataaa ttgacacaca gtagtttttg 300
gtttttatat tgtggatcat atgtatcaaa ggtaatatc ataaagaaca atgttatagt 360
tggtacaaa gggacaattc cacatttcta tacagggaat attttaagg tagagttata 420
tcagctatgg tgattgagtt taaatatccc tgcagggtca ggaacaaacc agctttccca 480
taagtcgttg tgaacactag ggaagtccca agggttatgn cttncttnc agtggagtaa 540
nttancttnc tgcanaaaag cttccaaaat ctgggatttg g 581

<210> 6114

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6114

atgagatgag tttcgtctt gttgccacgc ctggagtga atggcacgat cttggctcac 60

tgcaacctcc acctcccagg ttttaagcgat tcttctgcct cagcctcctg agtagctggg 120
 attacaggca tgtgccacca cgcccggcta attttatatt tttagtagag atggggtttc 180
 tccatattgg tcagactggg ctcgaaactcc cgacctcagg tgatctgccc acctcggcct 240
 cccaagggtgc tgggattaca ggcgtgagcc accgcgtccg gcccccatTT tctttttctt 300
 tcttctcttt ttttgagacg cagttttgct cttgttgccc aggctagagt gcaatgggtgc 360
 catctcagct caccataacc tctgcctccc aggttcaagc gattctcctg cctcagcctt 420
 ccaagtagct gggattacag gcatgcgcca ccacgcccag ctaatttgga ttttaagtan 480
 agacgggggtt cttcatgggtg gtcaagctgg gctngaactt ccgacttagg ngatccanct 540
 gcntaacctn ccaaaggctt ggaatacagg gan 573

<210> 6115

<211> 560

<212> DNA

<213> Homo sapiens

<400> 6115

ccttaaaacc actgcatacc acacctggag gttgtgagaa ttaacctgta atgaagatga 60
 gtggccagca ccaggacggg gacgtctgca ataaacatgg caaaatctga aaagcagggtg 120
 aggtcgacca ggctcccagg ctcccaggct gagacaacag aacctcagg gctgtcttca 180
 ctgagacgct tgatttgttt tgttttgatt ttggttgga tttgatttga gggagacatg 240
 atcccaccac attttacatg aacaaagcaa atctgacatc cagcccagg accaagccaa 300
 gaaagaggcg gtacaatggg gcggccagga ggctggctgg ctgtcaccat cggcaggggac 360
 agtaggagaa agccaagagc cacagtgacc cttccacaga ccacagtcct ccctactgcc 420
 acccactcct tgcccagagc aaagtcctgc tttctctgga catactccat tcgccaata 480
 cctangcccc taccatgtgc cangcnaagc acaaggnggn attggccctt gccctttttg 540
 gaanaaacCG ggcattnaag 560

<210> 6116

<211> 570

<212> DNA

<213> Homo sapiens

<400> 6116

```

aagtgttaca aattttatta aaaattaaca tttcaagagg tcatacgtat acaaatcaaa 60
ctgcaaaaaa attccaggca taaaaactat tatctgggtt agtgtgccat ctttcttctc 120
caaatgtcaa aatgtccaca aaaaaagtct ttagaaagtc aaatccactg tccatttgtg 180
ttgggtaaga aacctatgtc ttcattcact gcatggaatc catgttaaaa gaaccctgtc 240
ttggttgtat attatcacag gactcttgta ttaatccatt tttcctcaat tccccatagt 300
agactgccat cttgatttct cagtggtagg gtccatttga aactcttcaa gctgactggg 360
tgcttgatga aaaaattaaa agaaaaaac gctgttgga tcttaatctt ttaaacagaa 420
aacatccacc caccttgaag atatcctacc attccccaaa cttttatttg gaacagcttt 480
taactttgaa atgnaaagtg natgcaaaca cacnncact tcttgataag actggcgccc 540
aagtancaaa gtccttgnac taccccagat 570

```

<210> 6117

<211> 560

<212> DNA

<213> Homo sapiens

<400> 6117

```

ggtcataaat acattttatt tcattagaaa tgcataatta cagtgtttta gagcatttcc 60
cctagaaaag taggtcagca ataccccatc ggaaccgaga gctggctttg caaacacctg 120
cctcatgaca ctggacagag cacacagcaa agggctcccg tctcatgaca ctggacagag 180
cacacagcaa agggctcctg ctactcccct gggatttttt ttttcaaatt ttcttttttg 240
ttataaacac catagcaaat taaaaaaagc tgtttaaaca gaaaaatata atagttcttg 300
atttcccgcg catatgcgac gctctccgca ccgtgcctcc cctcgtgctc cgacaccaac 360
agcaggactc aaacgaaagg ggtctccggc tgggggcggc ggcggtgct ctttcagttg 420
ataggatgct gttccccgcg gaggcagcgg ccttcagacg cacttnagca gaacacgtgc 480

```

agcgctgctg tgccaaggcc tgaaaacagg gcccttgggg gccggncna agcggacccg 540
caagggtctt ggggccatgg 560

<210> 6118

<211> 553

<212> DNA

<213> Homo sapiens

<400> 6118

aataaagttt gcttgtgatg atgaccttct gtgctctgga acttctgttt tacaaaaaat 60
tggagttctt acggtccttg tccttcctca ggttgctgcc tgttgccaga aaggactggc 120
tgtgaaatat ctcgaggta gctttctttt tagagaaagc aattatttct tcttccaaaa 180
gtcttctctt ttcttcaagc ttcatctctt cttcttggtg aagtctctta aggtgctcaa 240
atttggcctg tagctctctc tcagcttctt tcaatatggc ttctttctcc ttactcgt 300
gcacaaacat ctgtttcatt tcttcttctt tcctctgacg ttcaccatgg aactcatgtc 360
ttttggcttc ataggtctct tgaacactga ctggcttggt ttctgggccc acatctgtaa 420
agcccatthc ctccagtttg cagcgctgt aaagctcata gtgcctggta tgggtctgct 480
ctcgcaggcc tncatatttg naccaatgag catttncgc actttaccaa gccagggggt 540
ttcattttnc ctt 553

<210> 6119

<211> 559

<212> DNA

<213> Homo sapiens

<400> 6119

aagatggagt ttactcttg ttgcccaggc tggagtgcaa tggggcgatc tcggctcatt 60
gcaacctccg cctcccaggc caagcgattc tcctgcctca gcctcccaag tagctgaaat 120
tacaggcacg cgccaccacg cctggctaata tttattttta gtagagacag ggtttctcca 180

tgttggtcag gctggctctcg aactcctgac ctcaggtgat ctgcccgcct cagcctccca 240
aagtgctggg attacaggcg tctgcaaccg cgcccagcct agtgttttgt atgtttattt 300
tctcacttaa tatactatgg aggtgttttc ctatattctt catccttaac agacaatact 360
gcattgactt tatcataatt tgtttaaaca atcccataat aatgaacatt taggctgttt 420
ttagtcctct gctgttaatg ctatagtgtg catcctagaa tatccatctt tataaatttc 480
tctaatttcc ttgnaataat gggtttaagt gnaaaaatgg tgggtcaaaa aatgaatcgn 540
atttnaaatg ggtaatat 559

<210> 6120

<211> 476

<212> DNA

<213> Homo sapiens

<400> 6120

caggccagta gttctaaaca gaccactcca gctgggctgt tttcctctca ccctcatgca 60
gcatttgctt tgggacaggc cactcctgat aaccagccaa gtgaattcat ctcacaggac 120
tcagggactg cccgcctggg agcagctgtc attggacact ggagtcaaga ggaggcacag 180
tctcctgcag tgaggggagg ttgtcacccc accttgggag tgtggccttc atgaagacag 240
ctgacttcaa gggcacgttg agagccttca tctttctatg ccaaattgat gtgactaagt 300
ggctgttcca agcagagccc agtgggcaaa gatcaggact cctatccaca ttctgagtaa 360
gggaggatgg agccacactt tgtgcctctg gtgagaggca gtgcgatata acaattaaat 420
gcatgagctc tgaacttagg tgcctggacg caaatggagc ctatagctgn nnnnnn 476

<210> 6121

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6121

gcatcagact gttgcctccc aagattcagc tgtcaaaggg caggtccctg ttctcagtag 60
 gtgaggggaat aaaactcgga cactgggcca tctcagaaca catctcagcc acacacaagt 120
 ggagaccaga tcccttcctt cctggtttga tgattggtgg gatcttcctc tgagcatcct 180
 gaacatattc atttaataaa tattttattga gcacctgctg tgtgccaggc actgtttgat 240
 gtgctgcaga atagagcagc aaataagagc aaaagtttcc accctcgtgg agcttatatt 300
 ctagtgcttt atgttgaata gtgctaagtg tggaagacaa ataataaagc agaatggtat 360
 tctggaatat cagggttaagg atgaaggta gtttttgaat aaagacctga agcaaggta 420
 ctggcagtga ttttttgggg aagaacattc caaacagggc atggcttggg tgttgacac 480
 gtgtagang gacagcatan gctggtatgg ctgcantgga atgtcccaag tctaacccca 540
 aattgagttt anaaaggctt nt 562

<210> 6122

<211> 487

<212> DNA

<213> Homo sapiens

<400> 6122

atgtaggtaa gctttttatt attggtttct ttacaggaac aataatccaa acaaactctg 60
 aaccaatcta taaacagaaa acctgttata taaattatta tctatttttg caatacatca 120
 aaatactgga ttgatgaaaa taaatagata acaaaaaaca atatacatca tttctatgtt 180
 tgctatcaga cccacaagt atgtttgttt ttacaattca ttataggtga aaaacaaact 240
 gaaacacaac aggtacgtac aattacgcca ctgttaagga ctgcagatta cacgtgttaa 300
 agctttttctt aataaaatgg gaacacattg ctaggtacac agaaacatga ttttgccta 360
 aagaacagct gaactgttga gagaagcaag ggcttcctag cggccttcca gtgtagcaga 420
 taatattacc ctgtgtaaca gagtattaca gagtttgcatt tttccaagtc tgtaagtcta 480
 nnnnnnn 487

<210> 6123

<211> 559

<212> DNA

<213> Homo sapiens

<400> 6123

```

ggaatatttg tattatactt atcagttcag cttcccta at gcaaaattcc aaaatctgaa 60
ctgctccaat gagtagttct ttgagtgtca cttcagtact caagaagttt caggtttaggc 120
cgggcgcggt ggctcacgcc tgtaatccca gcactttggg aggccgaggc aggagaatgg 180
cgtgaacccg ggaggcggag cttgcagtga gccgagatcc cgccactgca ctccagcctg 240
ggcgacagag cgagactccg tctcaaaaaa aaaaaagaag tticaggttt tggaacattt 300
cagatttcgg atttttggat taggaatact caacctatat ctccagttgg ttatcatctg 360
tgttttctct tttcttcag tctgataaaa atcaaagtat taatctttag agcaccatgc 420
gagatatagg gaaaactata tagaaaatac cgtgacatat attttttagat ctgcattaag 480
acaaagctat tatcggggaa tgggtgctaaa ctttanatcc ttccattaaa gaaaagaatt 540
nagatgnctt attggaatn 559

```

<210> 6124

<211> 560

<212> DNA

<213> Homo sapiens

<400> 6124

```

aagtaggctg ccaacttatt cttataactc ctctccatca taatttctgc aaggccattg 60
ccttattttt ccctcagcat ggctgcttta cacagtgtgg ccagcagatg ggagcacaag 120
aaagtcaatc tagatggaaa acaagttata gggataattg gcaaagcctc cttttctatc 180
cctctctaag accccttttt gcaaggacta gaatgtgaag tacgtaagtg taaagaagtg 240
ttcatgaatg tgttttaatt cattcaaaga ggtattttta aagaaagatt tcaaatacaa 300
gcaaaagagg agaattgtta gatgaacata actgtcccca gaccaacaat tatcaattcg 360
tagccaattc tgttttattt ctgtccctag gaatttgatc ctttcaatta tttattctct 420
caccataaat acttgtcaga ggaagaatcc acttcatagt ttgcatcaga aaaggtatat 480

```

gggacgttta ttcttttagct tttagatata ctgggtttct aataaatTTT acnggaaccc 540
tnttccttaa aagaattcna 560

<210> 6125

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6125

gactactaga caaactttct gactagaatg cctatgtcca cttttttgtt tgtttatTTT 60
tgagacggag tctcactctg tcacccaggc tggagttcag nggcacgac ttagctcact 120
gcaacctctg cctcccgagt tcacgccatt ctctacctc agcctcccaa gcagctagga 180
ctataggcgc ccgccaccaa gccagctaa ctttttgtat ttttagtaga gatggggTTT 240
cactngtta gccgaatggt ctctatctcc ttacctcng atccccccg cctcagtctc 300
ccaaagtgct aggagtacag gcgtgagcca ccgcacctgg cctgcctatg tccacttttg 360
gcatgcactt ctgccacctt gcacattgta gactaacaga gtttcacat tctgtctcgt 420
ttgcccacc actcaccttc ctcaagacc caccttcaat tctgtcttaa aatatgtaac 480
atggattctc cttgcttttt aagataaaga cccaaatcct tatactgact gnaagccctt 540
tgggggtacc tatgnctanc ta 562

<210> 6126

<211> 566

<212> DNA

<213> Homo sapiens

<400> 6126

ctacacatac tccttatatt tcattattct aagttataca caatgttcaa caggagtTTg 60
aagtttattt agtaataaac ataagtcatt gctgacaact gagaaaatcc tattcacata 120
aaccatcata gattaataat acatagtatt tgtactttta tgcaataggg tcccaggatt 180

caaacaagga aatttgattc cagagttggc attatgtagt tatgtactct gctacaaaga 240
 actagtggag gtaaacttcg gcagtaaaat tctcaacagt caaatattaa tgcatttcat 300
 atacatggct ttgcatccgt agaggaagat cagttccttc agcacacgtg ccaatttctg 360
 agtcttccac tagagaatcc tcaacagttt cttcttcaga atcaaattcc tgattatcca 420
 gtgattcaaa attatccaga ggttcaccat tcagctctct attagctctg ccatactctg 480
 acatggctctg ntacttntgg cagctctttaa tccccttttc agngngcaat tcaatggcct 540
 ttggncaatt ctttttgaag ttctcn 566

<210> 6127

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6127

ccaaggcgat acagattaca gttgctgacc tttttgcttc tcatatatga aaggcggccc 60
 tcatgcgcat cagggttaagt gcaaaataga tatgtggtga tggcatgctt taaaaggag 120
 tcgccaagca tttcaagccg ctccaggtta aatccgtcac tagcgtttga cagagtcaaa 180
 gcctgaagaa taagtccagg attggggcca agagtccttg aggagtaccc aatagaaggg 240
 ctctgctcag aatccatcct gcccttgagc acttgaatag tgtctgtcgt accaggcatt 300
 acggccatca caggacttcc atctgaggta gatttgtagt catttccatc aaggtattta 360
 ttactcagga gagtacattc atcgtgggc tggggctggt tctcgtaact gataaattct 420
 gaatggaata tgaggnaatt ggttgacagg gtatttcctg cttgtagtaa tttaactgat 480
 ttccttggca aaagctctgg tagctaaatc ataactggca tttggcgaaa atttgantgg 540
 aanaaaaanc cttaattggt gggaaaaacg ntgg 574

<210> 6128

<211> 572

<212> DNA

<213> Homo sapiens

<400> 6128

```
aatgagacag ggtcttactg tgtcactcag gttggagtgc agtggcgag tcttggctca 60
ctgctgcctg gacctcctgt ccaggattgc ctcaagcaat cctcccacct cagcctccca 120
aatagctagg actacaggcg cagccacca taccagcta attttgttta tttttttgta 180
gagatgagtt ctactatgt tggccagggt ggtctcaaac tctgggctc cagtgatcct 240
cccacctcgg cctgccaaag tgctgggatt gcaggaatga gccactgtac ctggcccaga 300
gcatccttaa tgtggcaagc acttctaggt aagtgttaag tatagaaaca taaagaagac 360
caaaccctag catcagtgat ctccagttc aggagaaagc ggtaattaaa catacctgtg 420
ccagacaagt gcaatgtaaa tgtgttcagc acaatcaggg gtatgcacaa tgggcttttag 480
ggaaacagag tanaggcatc aaagtcattc ttataggcat gtcaggaaag acttgaagc 540
atttccngaa ntttgggctc' aaaaatgng ag 572
```

<210> 6129

<211> 549

<212> DNA

<213> Homo sapiens

<400> 6129

```
cgtaacaaag aaattttaat gcataaggca cagtgaagg ctggaatcat taagcatcct 60
caaacacaaa gggcccagca ggctgagcaa aagaacagag acactctccc tctactaccac 120
tgggcgcctt ggacagtccc ctgaggagta gggggcatcc agtctttggc acggtgcctg 180
ggggcaggaa gtgactagca tgatcccagc taccctctg tgggaatact gccaccaaga 240
ggcagctctt tggcttgat aaagtcagt ccaatgtcca ggggtcaagc tctggaggaa 300
tgagggtggc acagtgcctt agggctgggc agtctctgaa cagtctcctc agccctcatg 360
ggcaacatgt gggcttcttc ttgctggcag ttaggtagag gttgctgtca tctactgttg 420
tgcggacaac atccccaatg cgtcgagccc ccgatttctc cagctcacca gcacattggc 480
ctcaaaggca atgcttgac acngaanaaa aattctnggc attnttacc cgnggagatn 540
aaaatgnca 549
```

<210> 6130

<211> 534

<212> DNA

<213> Homo sapiens

<400> 6130

```

agagtacgtt ctgcatttta tttctgcagg caacactttt gctcaccagc aagaacacag   60
cccgaggaag ggacccaata acctttcaaa acgcaaactg ctgcctgcgg tgagggccca  120
gggtcctcca cggagaggac aggcatcttc ctttcccacc aggaaggagt gagcccggag  180
cctctgctat gcgcaaggcg gtgtgcaggc accggctgca gctttttgct ctcttctttc  240
tctttggggc tgggctgggt gtgcgttctg gtgctgatgc tttggcctgt gaggctgagg  300
tcggcatctc gacccgttca attacagcaa cgaagaagcc accgctaagc gtggtcttgg  360
gggaagcccg gaggcagtgc tcggcacccg ggaacgtgct caggcctcgg tggggcccg  420
gcaggcaggg cgggagctag cctgaagcgt ccgggttctg ctgcaacgca tcttgnacca  480
tgtcttcatt ctctnctgga canaaggagc acatggagta naccaaccnn ttna      534

```

<210> 6131

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6131

```

gtacatcata ttttctatag aagtgattat atcacaaaga aaaatcctgc caaacaacta   60
caaatcaaga atctgtgggc aaaaagctca attcatacaa tgtaaacaca ttgaaaaaac  120
aaatgcaaaa taaaaaaagc tgttgataca tcacctcgaa aaattaacac aactaaatta  180
agggtatag aaaatatgtt cagcttatat catacacgtc atttaacttg aattttacaa  240
tttttaaaact aatagaattc agatttatta cttgaaataa tgggtataccc agctgttctt  300
cataatggca agcatattcc atatacaata caatttattt agcatagttt tataacttta  360

```

agtaaaatat gttagtgtt aaaagcataa aggaataaat atgccaagcg caaaatataa 420
 taatggaata gacttatgta ggtattaaaa tactgcataa tgacaaatac tgaattaata 480
 caactttcct attattcata atcataatat atgaagagaa aactgntcct atgccngggt 540
 ttttttttct ggaaaaaac tttnggggtta taccntt 578

<210> 6132

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6132

accaatttgc aaaatttaat ttatacaca tacacaaata aaacaatttt taacaaattt 60
 aaaattcatg gtccaccaa ttatttttca ttatttaact caataggaac tttcagatca 120
 acacgtacat attgtaaaaa atagttgact ccacattatg caatatacta tagcaaagga 180
 atattaaaa atagataag aaagggcact ggagttttgt aaaacaggaa aaaagaagtc 240
 ctgtatttta tacattgaat atttatccac aatagcataa tttgtctgaa aataaagtaa 300
 tgatctacaa ttatataaca aggagtatct tgggatattt caataattca aacatttatt 360
 ttttagaaaa gtggtatagc aaatgagaat tatgcaacta aatcaccatt ctaagaataa 420
 aatgtcaaaa ataatcctac atgacatact tggaaatgtt catatccaac aaggcaaacc 480
 aggtnaaaan ggaaactaat tccaatagg aagcaatatt taccanggtt tgccctttgg 540
 ccttatctaa atatggggcn cctannggca gatacctg 578

<210> 6133

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6133

aggaaaaaaa agagaaacct ttattttacaa ccatggggagt cccacaggag tacacaaaac 60

acacaatgtg cacacacaca aaatgaacct ttttaagtcaa taccatgcgt gctcctggcc 120
 gcgcgccacc cctcagtgcc ctatccgcac caccatcaca gtgacgttgt cggctgagcc 180
 ccgctgcacc gccttgttgg ccagcctggt gcaggctgct tcgtagcggg cgtcggctgc 240
 ggacttccct tcccgggtct ggatcttttc atcctcgaga caggacaaga tgaagttcac 300
 ggctttcttct ggggtaaaga ccttgaagag cccatcacag gccaaacaaa tgaacctgtc 360
 attgggggtc agctggcagc gtctgatgtc gggcacagag gtgacaccgc agcgcttgta 420
 ctgcccgtcc ccaatggagc gtgacacctc tagcacgcc aaaacacgcc catccctgac 480
 gtttcccttca gcttctgnat cctcatnecn tcttcatact gagttngaag atgctctttg 540
 ctgangctta angnttgatg gtttgacttt ctaata 576

<210> 6134

<211> 572

<212> DNA

<213> Homo sapiens

<400> 6134

gagatagagt ctcgctctgt tgcccaggct ggagtgcagt ggcacgatct cggctcactg 60
 caacctctgt ctcttgggtt caagcgattc ttctgcctca gcctcctgag tagctgggac 120
 tacaggcccc tgccaccacg cctggctaata ttttgtattt gtagtggaga tggggtttca 180
 ccatattggc caggctggtc tagaactcct gacctcgtga tccgcctgcc tcagcctccc 240
 aaagtgtctg gataacaggc gtgagccacc acacctggcc tctcctcctt gtttctaagc 300
 tgatctttta gccagtcgt ggaaccagat catctacaa ggaaggcagg cagtctgggg 360
 aggcagagac aagggaagca agctggttgt gtggggaggc gagcaccagc agacagtaga 420
 agggcccca cacaatgcagg angttggcctt cagggcagga atgcctataa ggatanaggg 480
 tggatgaatga aaatccctgg ttaaacttac cttctcancg gcaggaaggt naanggcttg 540
 gcttaantcg nccacttgcc aagcttaaca gg 572

<210> 6135

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6135

```

agatgttatg gcagatttaa cccaaactca tgggattctg agccccctgg gaaaggcatt 60
agatcttata ggtcagactg ttaccatgga gaacgtccgt gctgaaggat taatagatag 120
ccgggtatcc tggaaaagtt tgtgtgcttc atacacagat aacattagca tactcataaa 180
aaaggctctg gccaaatggg atcatttggg ttttgaaact ctagatattt gggatatcca 240
gtggaataat acatggggat gaggtggggg atgggaattc aaatgacagg cccttgtgcc 300
agagagacac tcagaaagtc aagcaagcaa gaactgagat gtgtctcgag catatittgc 360
attatttggg tccagaatag caacaagagc tgggtgtagc tactgtttct caggctgggt 420
tttacgtgct tttggtagct tcataagccc caaatccttt tctgggntca attctataac 480
atgggncgtc ttctaaactc ctcggtacta ctggnaagtt gggncacggg caacatggac 540
ctatggaatc anaatctgca tttaataaga ctggcngg 578

```

<210> 6136

<211> 566

<212> DNA

<213> Homo sapiens

<400> 6136

```

gagatagagc cttgctctgt ctcccaggct ggagtgcagt ggtgcaatct cagctcactg 60
caacctctgc ctccaagtt caagcgattc ttctgactca gcttcctgag tagctgggat 120
tacaggcacc cgccaccacg tccagctaat ttttacattt ttagtacagg gtttcaccac 180
cttggccagg ctggtctcaa actcctgacc tcaggtgaac cgccacctt ggactcccaa 240
agtgctggga ttacaggcgt gagccactgc acgcagccta cggatgcctt ttaaaggaaa 300
ttcttataga ccccctaaga aaatgtctct gattccaacg aatcctggga ctggacaatt 360
agataaacac tgtcttaaga attagtacta cgccttaaaa aaaaaaaaaag gcttttcaat 420
tgngaaacat cacagcaaaa taagttcatt tttacaacta gtaaaatatt agactatcat 480

```

aattatcaaa gtttatgatt catagnaaaa tgggttagac tcagaatgng aaattaggnt 540
taaaaaaaac tgggtggttn tactaa 566

<210> 6137

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6137

gataattaca tatttaatac gtgttgcttt taacagcaat ttttaaagta aacacatcat 60
agaccttata acttattaaa ggttttatag tgcttacaaa gttgattcta aaaaatatac 120
cttatttggtt ctaaatagaat aacattatct ggaagatata ataataaatt atagtagtat 180
gttttccacc acgatagtta agattgtgta cacatattca atatgaaatc ctcttaggat 240
tttcacacct tcagcctgaa aacataaaag cagattaaag tttggcatac aagatctcag 300
tctgatagta attgctttta aactcaaagt gtaaaaatat ctacttgaca ttctaggaaa 360
gcatggccac atgcacagac acattctctc actcactcca acacacacgt gtgcacacat 420
actcacaccc cagagtactc agaagatctt gcccttgngg atcagacaac tggcaccaat 480
ttcaaaaact aatggaaaaa attagctaag aatatggta aaccatactt aanaaggtgc 540
tggntgncat taaganctta acatgcnnaa naagccctct caa 583

<210> 6138

<211> 514

<212> DNA

<213> Homo sapiens

<400> 6138

gactgttcat ggccatcttt attcccagng ctggctatcc caagatactg ccaggccaca 60
gccaaccccc acctntgcca atgtgactgg gtcaccaccc catacaccag agcagccttg 120
agccctgccc caccctctgc cctgcggaag ccaagtcccc agctataana ccctgcccct 180

cctggnggcc caggaccctc aaagatgcac acaggggccc cagcgagggg cccctccgtc 240
 attagccttc tcctccaggc tgggctgcca agcagcctgg agctgagtct gtcccttgga 300
 cgctgggcca cgtcaccttc tcctccagaa ggcttcacct atgggcccag gaagtcctcc 360
 ttccgatagc ccttcgcccg aaagtcacgg tggagcttgt tgnactgcca caggttggcc 420
 aggaggctgg atgcttgccc gggaggactt ntcactggcn gggcttgccc gcttntnttt 480
 gatgaaaatg acttttggag nccgnnaaaa tacc 514

<210> 6139

<211> 572

<212> DNA

<213> Homo sapiens

<400> 6139

aaaattgtca agatatttat tgtgttaaca tgtgagacat acaatttgct cagtaaaaat 60
 agcacatgaa aaaatattat aagcttatat tcataaagaa atgggtatgt tattacctct 120
 ttttcttgct tgctcaggac tattaatttg acaaggttgg aatgtgcaca gcacagctga 180
 gacaccacca tttaacact gaatcactat accatgaact gacagaaccc tgcatagaagg 240
 atgaaaaact cataccaaa gtcaagaatc acacagcagc atggaggggg aaaatgaact 300
 atatgatgct aaccgcattt aatttcgaag tggggggaaa cagggcattg ggagtgaata 360
 atggttgaag ttccaggctc taactgtcat ccttaagtaa attaagtta actcatctat 420
 taaaaagtga gttaaaacag atgagtttta aggtccatct caactctaaa tgagatccta 480
 gcaaaaccan ggaatccncc ctttagatcc ttatgaaacc caggaaaagg tggggcccag 540
 tgcttacctg aggcacagtt ggaaccaccc tn 572

<210> 6140

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6140

```
atttgtgtaa aatatacata ccataaaatt tacaatttta accattttaa aatgtacaat 60
tcaacgtcat taagtatatt cccaatagtg tgtgcaacca tcaccaccat ccatctccag 120
aactctgtca tcatcccagt gtgaaagtg tttagaaacc atatatgtaa aggcaggta 180
attaggaatg tgctagctga agtcttgacc ggacagcaaa ttcattccatc cacctaccta 240
ctgtgtttat gtaccaggct tgataaatac agaaacaaat gagaccagaa ctacaaggta 300
agaaccttgt cgtctgtgat gctgggcccc ctgtcctact tcaaaacaga gtgggaagat 360
agaaaggatt cttagatgag tctctaattg aaggaattca agttttactt attctccttt 420
cccagggaaa tgggaggtgc tctcacccat ggcctcagcc tttncagtac ccaagaagtg 480
tgggatttct ctctcttttg gatatggnnt ggtctgggct cttgcatggg agacagagga 540
cnaatgnatac tatcanttgg tanagccttt agn 573
```

<210> 6141

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6141

```
cttcttttgg gccttctgta gctcctgctg ggccagcttt gcagctgctg cagccaaacc 60
tgtttcaata gaggctaccc ggggtccctc acgcacagga cggctcctgct tcggcagagt 120
tggggtcacg cgggcttttag gactccatgg agcatcatct gaattcttct ttttcttggg 180
tcgagatttc aaagcagggt catcatcatc agactccagt gaaggataga tatactctgc 240
atccttgaag cacgtccca agctgtcctg ttcattcaga ctggcgcttct cctcctcctc 300
ctcgctctcg gttctccagt atgctggccg cttgatgggc cgcttccctg ggggtgcgctg 360
ggaagcagga ctgtagaca ctgtgcccag cccactgctg gagctccac tgcttcgac 420
ctgtcccca gtccaccagg cctgcaggct agaggtagcc cggtgaggac gatgaaggac 480
tgcaggttgg catgcacaag catgcctgga tggcctcctg agtgcttggg anaacttggg 540
ncctngtgaa ggcannataa ncagggcccc cccc 574
```

<210> 6142

<211> 569

<212> DNA

<213> Homo sapiens

<400> 6142

```

aagactctgt tatgatttta tttcttcaat tgttccaatc acagtttcta atacagaaat   60
aaaactattc agcgtctccg ttcttgcttc attttgtttc acagagatct gcattttctga  120
gtttccaggc tccaatagca gttctgttaa gaacagacag ccagtatcat cctgagcact   180
gaggtatgct ttccatggcc gagacccagc cctactcatt gcgatggctt ggatgttcac   240
tacttgaaga gccatctgga ggggtgtcagg atggaattct ccccgccaag gcaacacttg   300
ccgatgagca actttaaggc taagccaagt tttctcaaaa taatcagcag taagctggcg   360
attggggact agcatgaggg ctccagaatc agggagtctt tgtaccctct ccttgttctc   420
ttcaggaatc aagggtccta aaagagacag aaaacttgtg tgaaagatgt tcttaatctg   480
taggactaag ntttttatnc aaattccaaa tgtcccaatg nggcctttat ttttgacaaa   540
angnttgaaa taaccgggnc caaactttt                                     569

```

<210> 6143

<211> 570

<212> DNA

<213> Homo sapiens

<400> 6143

```

caaagtagac ctctgtcttg gattactatg tacctggaca ggtgaactct tgtatgtttc   60
tgttttgggg attttaggg gttttccatg tacattcata gagcctggtc agcagcgagg   120
agtccttggt gcgtatggac ggaaggctcc ctggcaccca gatgtctccc ttcgtcctgg   180
ctgacacaga gcatggtggt catctgctct tcatgtccag caggctcaga aagaactcgg   240
agttccccctc gcacccttgg gccaaagcttt tcaagtccga gtgccaggac tggatgagct   300
ggggtttgtg tgtctgctgg cggcacagtg ggtgtgcaca agaccaccat ttgggtatct   360

```

aacaaacaca ggctcacaaa agggattttg gcatatctga caaagctttt tgtctgaaaa 420
 gttggattga gcttcctttc aacttcattt tatcgtaggt gtagaattaa gtttcggacc 480
 tggccaggcc ganaagccac tggatgggtc tccggcatgg atctgncctt nagggcccca 540
 tcaggaatgg gcaaagaact gccttaccag 570

<210> 6144

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6144

gagacggtct cactccgtca cccaagctgg agttgcagtg gcgtgatctc cactcactgt 60
 agcctctgcc tcagttcaag cgattctcct gcctcagcct gagtagctgg gactacagtg 120
 gtgcgcctgg ctaatTTTTTg tatttttagt aaagacaggg tctcaccgtg ttggccaggc 180
 tggctctgaa ctcttggcct caagtgatcc acccaccttg ctcagcctcc caaagtgctg 240
 ggattacagg cctgagccac cgtgcccggc catgttgctt ttataattga gatatttcat 300
 ttgttttggg ggtaggcaa atttaatttg ccattcctca aactcagtaa cttcaaatat 360
 aaacaatgcc tagaatgaat atggttcctc attatttcta tcaaactact acaaatactg 420
 aagaatccca aagtagtttt ccacagaggc agaaaagcag ttcaagggtg tgaaaatctt 480
 caatattaat aagccctggg acattttaat gggactttat atttcaaggg aatgcaattt 540
 gaatcataat cantatatat tggccccaaa agtaccttaa ttc 583

<210> 6145

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6145

gctgcgacag tctctttatt tccatctcag tctcccctgc ctgctcattc ctggggctcc 60

aggccccaag ctcagcagca gagagtttat aaataaataa attacaaaag cgggcaggga 120
 gtggcctggc cagccctccc ggggctatgg ctcagtgtc agtgagtac agctgcagga 180
 tccgctgtaa gtcctcctcc tctgtgtgcc cgcgccgtc ccgtcctcc tgctcccgtg 240
 aagacaactc cagggccagg cgcagctgct cttcaaagct ggggtggaccg ggggctgggg 300
 gtgtcctggg aggggatcct gggcccctgg gctctgtgga cagctgcagg ctttcctgga 360
 gggcccgtc cagctgaagc tgttctcat aaaccgtggc ctggggagga gggcgggcac 420
 cgggcccggg tgttggtcaa gggcttccca gacggtcacc tgctccgnct natgcccgt 480
 tcaagcangc tctgtggat ggcgaactgc aggaaggcat ngncctcgtc ccgaagggt 540
 tcgttngct tcatgccaac acgctttacc cgtngggact tta 583

<210> 6146

<211> 579

<212> DNA

<213> Homo sapiens

<400> 6146

ctttgagaca tgctgtcagt cagttgcca ggctgaagt cagtggcgag atcatgcgtc 60
 actgcagact tgacctccg ggctccagag atcgccctcc caagtagctg agacaacagg 120
 tgtgtgccac gacatccggc taatttctta atttttctgt agggatggga tcttactatg 180
 ttgcctaggc tgttcttgaa ctcctgggct caagcagatg atcctcttac cttgacctcc 240
 cgaagtgtg ggacttacag gtttgttcca ccatgccagc ccacaggctg ttttttagga 300
 ctagaagaca cttctctccc ctgtatcctt cccttctctt acatgtgcaa cctcattcct 360
 gcgctacagc tctctcttta ccaggtggat ggcacctata cacctacagc ctgggcatca 420
 gcatcactgc tggcgtctcc ccctacccaa cgccagccct tacttacctt ctattctctc 480
 atctacttcg atngggctcc tcatttgggc cccaccatca ttcccttctt gnttgaagc 540
 ctaattcact aatcctcatg nnaacctggg cagcacttg 579

<210> 6147

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6147

```

gagacagagt cttgctctgt caccaggtt ggagtgcagt ctggatcgca gccaagagcg 60
cgatcttggc tcaactgcaac ctctgcctcc caggctcaag caattctect gactcagcct 120
cccgagcagc tgggactaca ggcgcacacc accacgcccg gctaattctt gtatttttag 180
tagagatggg gttccatcat attggtcagg ctggtcctga actcctgacc ttgtgatcca 240
cccgcttggc cctcccaaag cgctgggatt acaggcgtga gccactgcac ctggctggaa 300
tatattttta aataatatgc atgagaaaat aaccagtttc ctggacttca gaagaggaag 360
aaaagttgcc ctccctctca tttctttttg ctttgacaat taaaacatca gacactactg 420
ttcaaaagca ccccaaagac cagtgcataa aaacaggtag cccctaattc atctgcataa 480
gacataactg nttatcaaac cgattataat caagcatttn cnaacagctg gcttatttct 540
caaaaagcat ttggcttaaa antagaatgg gatatncaa t 581

```

<210> 6148

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6148

```

agtagagacg gggtttcacc atagccagga tggctctgat ctctgacct cgtgatccgc 60
ctgcctcggc ctcccaaagt gctgggatta caggcgtgag ccaccgcgcc cggccctcct 120
gctgtgaatt ttctgaacca tgtatgtgaa ttaatttgca caggttttcc ccattactt 180
agatgtacag gatttctttc ctgtgtgact tctcacatga ccttgaaagg ctttgggaca 240
actgaaagct ttccacatt tttcgcatct actgggcttc tgtccaatct gcgttcttac 300
atttttggaa gagcaaagcc cgcctgaagg tttccaca ctggctgcat ttacaggttt 360
ctccccagtg tgctttctct catgtttgtg taaagatgag gaccaacat acgttttccc 420
acacgtttca catttataga ctttctctct aagtttgnga tttgacatct gtggaagggc 480

```

caagncttgc ggaagacttt tccaacgctg gcccanttac anggttcttt tancatgcgt 540
ctcccgggtt gggttaaggat aaggncacc naa 573

<210> 6149

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6149

gagatggagt cttgctctgt tgcccaggct ggaatgcagt ggcctgatct cagctcactg 60
caacctccgc ctcccggatt cagccattc tcctgcctca gcctccctag tagctgggac 120
tacaggcgcc cagctaattt tttgtatttt tagtagagac ggggtttcac cgtgttagcc 180
aggatgggtct cgatcttctg acctcgtgat ccaccgcct cagcctccca aagtgcctggg 240
ggtgacaata agaatgcta ctctttaaat tgccttcctt atttcagaga ccaagtgaca 300
gtgtttaaca ccagagacac agtgggcaca gttactttca tgggcagcag ggccacagtg 360
gtaaaatgaa tgtttttgac ttgtgagggt ctttggtagt atctctagga ataaaatagc 420
ctactaaaat atatgttgat ctacataatt agaaattatc angnaagtag aattctaatt 480
tggatcacca taatagncat gggcctttcc ccaggttttg gaacctgaca attttgcaaa 540
cctggagncc atgacattgg tgggaatata tactaaaa 578

<210> 6150

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6150

ctaatacct tatttagcaa aattaaagt tggcgatgat gtgttgcttt ccagacttt 60
tatttgaaat gtgactgctt tgtaaaactc cagagtcaag gactcatagg caggaggatg 120
tcataaatta acaggaaagg atgagaaatc tccactccac tccctcctcc ctcccttgat 180

cactcattcc ctctcttcca ttcattaacc acccaccaca tgccatgccc taaggaagca 240
 gctatctaag aagtcctgc ctgcaggggc ttacagacc aggaggaagg caacccatag 300
 agccaggatc ctgataacca ctgctgactg cccctctgcc taggcaccaa ctaaggtggc 360
 tccaaaaagt gaggccttgt tgggaaggga aaaaacagca aaggtcaagc ttggatgaac 420
 ccatccagaa ttttgcaatc agaaatacct agaaaagaat tatttttagaa gaacaggggg 480
 atgccagggc ttggggatga ggaatgatgt ttcagtgtt aaggncctg aaggcttggg 540
 cttcctgctc aaaaccagg ggnccagggt tgcctt 576

<210> 6151

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6151

cagagcaaaa caaagtatct tattccacta gcagatgttt ctccaaaaac aaaaaacaaa 60
 ccaatacaac cacaaatact acccacacac aaccctgaaa cataagttgc catattccag 120
 tggctctgaa ttttaacatg ttttgctcta cattaattca agaaataaaa tgagaaacag 180
 ctttgaaaat gagattaact ctttgctgt aattatactt actctataat tcaaactatt 240
 tagctgaagt cagttaacga gtaaaaaccg cggatacagc tcaaactgct ctttaacttct 300
 ttaaagtgtt actgttctat caaaactcag acccaagctg cacaggtgta acttgaggca 360
 ctaacaatct tcctaccaga cgtaatatgt ttatgtgttc ttaaagctgg gcgcatatac 420
 aaaatcactg tcatcacaca taaacatcag aaacttttct tggacaacta gaccaatagt 480
 ttctcttatt ataattatct ttaaatacag catgtgtaac agttcagcat ttaaaggac 540
 tcccaggnta tgattaaaag gatgctcagg ttgagaaa 578

<210> 6152

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6152

```

ggaggcctct tctgcagaag ataatctgga ttttttatgt gatgactctc cacagtcttt 60
tttggtttta tcttttcctt tttttgactt gatttctttt ctcctgtgat ggaaatttaa 120
tttaatggaa cattcttggc ataaccttaa tttaacgagt gcatttctct tctcaccatg 180
ctcaatataa ccaaaattaa ctteccaact cttaagcct tcttttttat cacaatattt 240
atttccacag aaaaattgac cttttcctga aattacttct ttttctactc gccacctaaa 300
tccaaactga taataaaaaa attacattta tgccaatgta aatttaaatt atacagaaat 360
ctaaacatgg agccaacaat gacattcacc aacctaaaaa ataaatgtaa ttcccatcat 420
gacagatttt tctcttctta taggatttga agaaaatata ttgaacaatc accaatttat 480
ctggtaaaga acaatctact ttaagatagc ttaaaagtta tangtgccan gccacaagat 540
cctaagttac caataatata tccggtctgg aagacgcaa 580

```

<210> 6153

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6153

```

gtagagatgg agttgccag gctggtcttg aactcctggc ctgaggatgat cctcctgcgt 60
tgacctccca agtatcttag actacagatg cactccacca cgcttggcta acttaaattt 120
atTTTTTgt agagacaggg atttgctttg ttgcccgggc tggctctgaaa cccctggcct 180
caagtgatcc tctgcctcg gcctcccaga atgccagcat tacaggcgcg agccaccata 240
cccagcctta ttcttgagta atTTTTcttg tcaattttat ttttctgttg tgagagtgat 300
catggaaaca gtgggtgaga aactggtct gtctagtcca ttcttgtctt gctgttgaaa 360
ttccagatgc agccagtga ggccccagct tgcctcactt catcacagcc ctttttcttc 420
ctttgcacat gtatggtgtg ctacagtaagt caagtccaa tccacctgga gttgccgggg 480
gtTTTTTTTT ctttctttct ttctttnttt tttttgaaac ggantttgct cttggtgncc 540
aacctgaang ccangggacn attingttac tggaacctcc 580

```


<210> 6154

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6154

```

ctgggccaca ctgagtgaat tttaatgcag gatggaagca cacagatggg tgatcaggtc 60
tctctttact gaaacacaga acatgtgcca aggtgagtcc aaggacacct ctgggaacag 120
gtgaagcccc tccccataca tacactccgg tggatgtgag cgagggtcct gttgccacat 180
ctggggtttag gggcttggac atgctgccct tcatgggaac cttctgggta cctctcagca 240
cagtaacgca gctgcagtct gtcggtgggg gccaggcta ggggcagcac cctcttttgg 300
catacgggac atgcctggct gcagctgatg tccgttagcc tctcctgaca cgagtaagg 360
agacctggaa gtgaggcgcg tgggcgtgga gttcccgggtg gagctgctgc atcagccttt 420
ctgccactct ggggtcantg agggctcttc ggggaagcca cactcaccgc caggaggagg 480
aaacctncat tttaacctgca ctcacgtctg nggccggcct tgtncgggca gtctgggcnt 540
ggctgntggg ggcttnatcg gggcttncct aggt 574

```

<210> 6155

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6155

```

gccagctgg cacatttatt ggcattaaaa cacaagaccc ttcccatcac caggaagcca 60
cgcccaaagg gtgtccctct gcccatttc tgcaaaaact ctcaggcctt agcagtagcc 120
tgagctgccc ccagggtgt gagctgctga atcttctgac tcatcatttc catgacggcc 180
tgtttcatgg cgtgcttctc ctgaagagct gggttgattt tctccatctg cttgggttaga 240
aaatctatct tcctcttgaa gaagtccttg gcatcctcag ctgtcttctc tacatagtac 300

```

ccagttccca catcgatgag cacgtgttcc acatcatgca gcttccaggg gcatacatct 360
 gagaagcaag aattaaggga aaaactagcc agcccagcat gagccatgat tccgccagcc 420
 agcctgcttg gcctncaaag accttttttt ncaaaaggct ncangcataa ggctgaataa 480
 tctgganggc ttagacaatn ctataactnc aatggaagga agacggaaag ttggtcttaa 540
 ggngaaaatg atgatgctgg acaccttttg gnctgcctaa tcc 583

<210> 6156

<211> 508

<212> DNA

<213> Homo sapiens

<400> 6156

ganactgatt ctactntgt cgcccaaact ggactgcagn ggcacaatct cggtcactg 60
 caacctccgc ctcccgggtt tgagcaagca attntnttgt ctanacctnt ggagcagctg 120
 ggactacagg ccacggcaac actcccagct aattttttgt attttttagta nanatgggat 180
 ttcacatgt tggccaggct ggtcttataaa ctctgacct caggngaacc acctgcctcg 240
 gcctcccaag ngctgggatt acaggcgtga gccaccgnac ccagccgacc cttnttaaaa 300
 acncagagaa ctgaggtgtc ctgatgggca tccaaggaaa aagcagccca acgagttttg 360
 caggccccggg gtcancaggg ggaccaggct ttaccacct acacagcccc gaattntnc 420
 agcaaatccn ggatctgntt tanggacatc aggtctttgg gctttaaacc tttcccgat 480
 ngttccacgt ctggaanaac ttgggaaa 508

<210> 6157

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6157

actaaaataa acctgttcgg gggaacagct actagatgaa ttttaagggtt ttatgcacct 60

tatagaactt atagcaaaaa tagttctagt tgatttcatt ataaataacg ttttcaagaa 120
 cctgtgcaaa actgtcaata atttcctaaa gcacaattga tcagaaaaat ccatgattgt 180
 tcagccttca cacccttctt catgtaagaa cacctttctg tacatctcac agttacttat 240
 taggttgaaa ggtatatgga gaatgggtcat tagacgtctc gacagccacc tgctgttgac 300
 cacttgccn ctcaacagga accgctgtcg tctgcatatg tgcatactgn ggcaagtagg 360
 ctccttgcatt aactgacgtt gcaggcatgt atggtnccgn gctggctaata gacagatgac 420
 tcattctgtg ggccnaaagg cttgacattg atgcccggct tnaatgacat ggggggctcc 480
 attgagggag ttaacacggg acccaggggc ttganaatat atgggtgagg ttgcttcccc 540
 naaggctttt gacctggtag gcnnatcccg ganaatncat nttggggg 588

<210> 6158

<211> 527

<212> DNA

<213> Homo sapiens

<400> 6158

accattatag ctaattattt tattacaatg ntttcanaat tagatctagg ngacataaaa 60
 tacncaaaag cataaagcca tntgaatagt acagtcaaca agcaacaacc agtacaatca 120
 gcaataatag agaactttta actttgtatg tcacagagaa tgnatatacc tttttaataa 180
 aaagcctgaa taaaccaata actattaaag aaatcacaaa gctgattaaa aatctactat 240
 taaaagngtc atcaggatta gattggttta cactttgncc tagctaactt ttaacaaaca 300
 aataattcta atgctattta aattattcca gaccacagga aaaaaattga aaactcacat 360
 attcatattt ttttaaagct agcacaactt caataacaaa acttgataaa gatagcatca 420
 gaaggacaaa atacaatttt actttggaat gaaaatgcat aattctaaat taaatactgg 480
 gaaataaaat ccnctcngnn gcaaatcatt ttttcncaan gnccagt 527

<210> 6159

<211> 592

<212> DNA

<213> Homo sapiens

<400> 6159

```

acaacccgta ggttttgaca ttttctatTT tctctggaac cttaaaagat gttcacaatg 60
aacatgggct attcttcata tggTctaaga tatctcccat ctcatgaact cacattactt 120
atgaaaacag atgatgtaag cattccaacc tctccttgac ttgccaatgt tagtcatgtg 180
gggtcaagtG aaattaaaaa ggccttggaa accagagagt cctgggtttg aattctgatt 240
ctgattctgt gacttcaagg atacatTTTT ttcttttatt aaaggagcat catatgactc 300
ctagccagct ggacagtgag gataaaatga gacaaggcat gcaaaacgta cagacataga 360
aggcacgcaa taggttttac aacctctccc ttgccttgat tgnTcttagt tttattttct 420
atttaaataca atcaactagt ttaggaataa acatgacatc ttttgaacaa tttgcatgca 480
gaacttggna tataaaaaat gggaaattag gacttaggga tttactggta aatactcctg 540
gtgaatatat catggattca tgcntttggg gaggcctaac ttttatccag ag 592

```

<210> 6160

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6160

```

ccttctttta ttaaagctat cattccaggc tttgatcaaa gatccaagaa tatttgttct 60
accaggctgg aatgaatgtg gtttgggaagt tcagagtaca tttaaaagct gcaacaaaaat 120
ataggtagcc aacaatctca gaattttgga tcagcccaga tggagatagc aatttgaaat 180
gtcttcgata ccttacttaa atgacgaaat gtctatcagc ccagatagag caatttgaaa 240
tgttttcgat cccttactta aatgatgaaa tgtatatcat actatctgta aattggatat 300
tccattacag tgataacgta cagaattccc atgcgttatt acactttcct gagagtaaag 360
caattagaat aaccttaatc ctagcaacaa agtttttttt gtaggttttt tttttttggt 420
ttttttttgn cttttttgtt gcgttttaaaa catttgggct attccctgac gatctatcat 480
ggaaatttga tgctaacatt ggcactttga angcaaacta tttttaancc aatggatttg 540

```

gttaaaaacc ttatccaacc ggncttaaan cccgcttcca aaa

583

<210> 6161

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6161

ggccctcctt acactttgga gactcttccc ttatgtgaaa ttttataaag aatgaaatct 60
gaaggaggtg ggagagggtg tgtccgggcc cccatctcct tgggtgtccc ttcttatgcc 120
ataatttctc cttggcctca gaggcacctt tactgcaggt gagggctctt tcaagcccag 180
atggagcctc aatggcctgg gtgacaccca aggtctctct agactcttat gttctacctg 240
tctttctgaa agcccatgg agtggggagg acagccatga catagtaaga aaaggagaat 300
tccctagcac ctgactgaaa aaaataactg ggaagagaga cagtgacaat acacaatata 360
catgacctca cgtacatgga gcacggtgac catgaactgt aacattaagt atcacctcag 420
aagcattcca aacctgggtg actgancgcc ccagtagatg angaggagca ggaaggcttg 480
tgtggatggt cacacaccgg cccaacttcc ccaagaagat aagcncatcat gggaaaatca 540
gagagactgn ngaactcaaa tccctgggat tcccggaatg ggcacctntt g 591

<210> 6162

<211> 579

<212> DNA

<213> Homo sapiens

<400> 6162

gagattgagt ctactctgt agcccagact ggagtacagt ggtgcgatcc tggctcactg 60
agacctctgc ctcccgagtt caagcaatcc tcctatctca ggctcccag tagctgggat 120
tacaactgca caccaccagg actggctaac ttttcgtat tttcagtaga gacagggttt 180
cttcattgtg gccaggctgc tcatgaactc ctgatctcaa atgatccacc cacctcgacc 240

tcccaaagtg ctgggggttac aggcgtgagc caccatgccc agccttattt tacttttctt 300
 taacctgaca attaaccact gatgttactt tttgggagct aggttatata ttttttaggt 360
 tcttgattaa atggtaaata ttccagaaga cacatatgca gtatacatgc tgacttgatt 420
 aatTTTTTgt aacacctcag ggtagagatc tatttcatga tcaacacaat aaatangaga 480
 caaatacctt tgnttgcaag aaacagnttn ccaagcataa tgggatacct aggttaccat 540
 tcttaacttt atgcctaatt taacctaaagg aaaaagtca 579

<210> 6163

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6163

gagatataag agtctcgtc agtcgcccag gctggagtgc agtggggcaa tcttggtc 60
 ctgcaacctc tgccttcgg gttcaagcga ttcttgccc tcaacctccc cagtggctgg 120
 gattacaggc atgtgccacc acaccagct aatTTTTTT gtatttttag tagagacagg 180
 gtttcacat gttggccagg ctggtctcga actcctgact tcaggtgatc caccacctc 240
 agcctcccaa agtgctggga ttacaggcat gagccaccgc accgggccag tttcctgact 300
 ttttattttc agctataaaa caattatgag agccaaagga gccaggatca cttccaaaa 360
 cattttgttt tgtacttctc taatttatga ggcattcttt cttctcaaag caggatatta 420
 cagtgcagat taaaactgga tattaaagtt aatggtgaca aattattaag tagtttgaag 480
 aaatccttag aatatcaaga ttaagagaga cttaatggcn gaagaaaaaa gctactgggg 540
 gttcaaagct taaggtttan aattctggcn tgggatctta acccttnt 588

<210> 6164

<211> 584

<212> DNA

<213> Homo sapiens

<400> 6164

```

aaaactaaaa ttggttttaa taaaagtttt ggagtcattt aaatgagtaa ctatacacat 60
tcctcctctc cagcaagtat acagaaatct tcccttactc caatttgacg ctgcaaaatc 120
atacatgcac cccaaactga tctgttattg aaattttctt ttctggcttc acccattact 180
ttaacatata agaggaatta acataacagc ctagagaaca gaaataagag ataatagggtg 240
cttcagtacc acccaaatta tctactaaga ccacagtgtg ggcaacagaa tgcagattca 300
tggtagtagt tccttgaatg aaagagttca gacagaatct tccacaaaca caaatttttg 360
cggatatcaa atcttggcag agatggaatg gaatgatatg agagccatat ggaatcctca 420
tagcgggtcc cgcgcttgcc ttcagggttg agatgaacag gaangctcgg acccggcggc 480
tgactcctgg gaagtctgct gacagaagnt taacacnggt tggccccctt ggccccgggtt 540
ctaagcccaa gggggcnant ggccggtgnn accctcccct tnaa 584

```

<210> 6165

<211> 549

<212> DNA

<213> Homo sapiens

<400> 6165

```

accattttct aacaattttt actgtaaaaat ttttgggtcaa agtttctaagc ttaatcacat 60
ctcaaagaat agaggcaata tatagcccat cttactagac atacagtatt aaactggact 120
gaatatgagg acaagctcta gtgggtcatta aacccccctca gaaagtctaa gattcagaat 180
gtctccatca tattagaaga aaaatgtact gtattaaaaat tttaaattgca tttttacaag 240
ttgtttttta attagtgttc tatttacatt gcagaacttc caccaactgc agtagtttaa 300
ctttggcaca acattaagtt ccattttctt tgggtattgg atcctgcttt ttgagtgtgt 360
atgccccaaa acgttttcaa tgtcatcaaa gattgggcaa attcacagta aatcagacat 420
cttgagtiga agaattgatt ctctttcaac gttttangca gattcagnca tctggattta 480
aacagcttcc gttcacatgt cgnggaggtt nccaaggggc actatcattg gntcttcttn 540
atcctttcc 549

```

<210> 6166

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6166

```

attgcctaata gacctatata gaaccaccag tatagtgtta aatagaaatg gcaagaacag 60
acatatttgt cttattactg atgggaggag gaaggtaccc aatctttcag cattaagtat 120
gattgttagc tgcggtttt tcataaatgc ttgtttacca agttgaggaa tatcccttct 180
attcctagtt tgctgagtgt ttttatcaca aacaaatgtt gaattttgtc aaatggtttt 240
tcttcataag ttgagataat ccatgcgtgt tttttgtcct ttattagtag attatattac 300
attaatttcc atatactgaa ccaagctttc attcctgaga taaattacac ttgtcatcg 360
tatatagtca ttttaatatg ctgctagatt cagtttgcta atattttgtc aaagattttg 420
gctatatatta taaccggta ttggtctgta agtttcttgg ggtatcttgg gttttgnaat 480
actggncctg gaaaaagggg taaggaaggg tccattgga tccaattttt gggaaaagtt 540
gtgaanactg gcntcaacct cttataatca cccgg 575

```

<210> 6167

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6167

```

aattaaactg gggatttcaa aaaagtggcc tttattttcc aatttctata gcaaaaccag 60
ccataagtga acatggatgc tcttcaatat tttccagta ttgaatgaaa aaagacctct 120
gccccagccc acatttcctt tgttgaatga gtagagaaga ctgagaagta tcactcacc 180
gtgatgtggt ttgtcccttt tccagccagt gtgttggtta taaaagtcac ctttcagagc 240
tttggtcctt gtaatgcccg tctttcctgt gtccaggaat aacctttgct actaggcagt 300
cctctgaaag attttagaa ggtaaagtg gaaagggact tggaagctca tagaatccat 360

```


gcctcttctt ttagcatcaa ggaattagaa gtcctgagag atgaagaatg ttgtcttcca 420
actcaaacca tttctgaagc catttccctg gtactgcatt gnccacaccc ttncccatgn 480
tatectcatc cggtaagctg ntttaatgct ggacagnctg attggctttg gcagcaacat 540
ttgnittaca gattcctact taaggaagaa agg 573

<210> 6168

<211> 584

<212> DNA

<213> Homo sapiens

<400> 6168

aaattaaggc tcgaaagaag gaaaaggact gaaactataa atgaaaccct tcatgtttct 60
agggctgccg gtcagctgct tttagtgcct gcctcagttc cgcccactct gggcagggag 120
ggacctatcg atgtgcctat ctttctacac aggggctgtg aatgaagctg caggctcacg 180
tgtaagggga aggccaggca aggacccagg acagtctgct gcagaggaaa ggggcacctg 240
acagctaccg acagaggagg agggcgccact cccctggagg aggagcagga gctgtgagcc 300
tcctgagaca gccaatgcta actcggtgaa aaagggttaag accgactaac attcacaaaa 360
cagccaaggc ataagggtc tgcagcttag gaatcaatgc ggaactcaga tctacatgaa 420
ttccactcag caaatgtaaa gccttttttc cccttccctt ccacatctct tctgggatga 480
gccccatagg atcctggagc aggggatgtc ccagggccag tcagaacctt accggagtgt 540
gaancaaagg tgccctttgt gggtnctggg gggggcaaca cttt 584

<210> 6169

<211> 569

<212> DNA

<213> Homo sapiens

<400> 6169

ggctctgtttt cagggtttttt tttttttttt tttttttgan aatgggtcct aaccactttg 60

cccaggctgg tcttgaaccc ccaggctnta gcaatcctcc tccccctggcc tcccaaagtt 120
 ctgggattta cagggtgtgag ccacatcaaa atttaaaaag caaaaaagac cccatgattc 180
 tgttacactt cttatittta cttgaatata nagtcctttt gtttgtttgt ttgtttgttt 240
 ganacanagt ctgcctntgt tgccgaggcc anagtgcact gacgcaatct cggntcactg 300
 cagcctccac cacctgggtt ctaatgattc tcgtgcctna gcctcccag tagctgggat 360
 tacaggcatg tgtcaccaca cccggctaatt ttttggtatt attagtagaa acagcatttc 420
 gtcattggtt cccaagctgg nttcnaactc ctgagcttan gcaatncggc caccttaagc 480
 ttcnnaagg gctaggatta caggcatgaa nccncatgcc aggccaaata agacccttt 540
 taatttgaat taccatcccc ttaagcngg 569

<210> 6170

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6170

ctaataaaat aaatatttta ttaacgaaag tctggaaaat gtgtgcacta aaaagtgact 60
 ataaatgtta aattaaaaaa ctttcaaaga acacatatca cacattcaat ttttaaaact 120
 ttatataaaa gctctattat aaatacaaag ctaaactatc tgagtactaa caacacagtt 180
 catacaaaga aacttaacag tagtaaaata cagatatata agatgcttat ttttggtcct 240
 ttaggataaa agaactaagt tggttttttt tacatggctc caggcacaaa aatagaatat 300
 aagatggtaa ctgcaacatt cttagtgttt atccttgtaa ttctttaaat gtcaccagtc 360
 ataatagcaa tgaactcctc ttggttttact gtggttaagaa agaaaatgaa atagtcagaa 420
 atataaacat tttatttttt cagaatccac gactaccatt ttacactaag tatttaaaaa 480
 attttacatt atgcaaaatt attacattaa gacatggctt tttggctttt acttctttgg 540
 taggaagngg acctggttat taaaaggnc tttttggtgc caaaatc 587

<210> 6171

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6171

```

caaattcata ggatgtcttt ttattatgct aataatttaa tcacattcca tggggtccac 60
aataaactct ttatattgaa ttccattcca taataaaaaa aaaaaagaaa aaacaaaaac 120
aaagcaagga gctctatfff tgggaaaaca atgggtgctc actgcttaac tggattgtat 180
tttatttggc ttttcaacac ggcaatacaa acatattatg aaatgagtga aaagggcata 240
ataattttat tctaggtttc tactaccttc atgattaaga cttactagc tactgctgct 300
tggccataat ccactacagt ccctaaacaa aaaaactatg aacaaagaca aaaataatct 360
gtaattttct ctacaaaggt taaccctaat taacttacag cagaggtgaa caagctactg 420
cctgtgtgcc aacataacc agcttggttt tattagtaag gttttacata ttatctatga 480
ttggtttcac actacattgg caaagctgaa taactgcaac agaaatcaca cagcctgcaa 540
agcctaataa ttcctattgg gcccttaaaa gaccnaaaa tttggtgc 588

```

<210> 6172

<211> 585

<212> DNA

<213> Homo sapiens

<400> 6172

```

cataccctag tggcgcctgg aactccagca agacagaact gttcattcac tcccctggaa 60
agggggctga aaccaggga ccaagtggc ttgctcagcc ggtcccattc ccgtggagcc 120
cagcagtcta agaaccactg gcttgaaatt ctactgcc gacagcagt ctgaagtga 180
cctgggatga tcgagcttgg tgtgggaagg ggcattccacc atttctgagg cttgagtaag 240
cagttttccc cgacagtgt aaggaggctg ggaagttcag actgggcgga actcaacaca 300
gcgtggcaaa acagctgtgg ccagactgcc tttctagatt cctcctcaca gggcagggcg 360
tctctgaaag aaaggcggca ggcccagtca ggggcttaga gataaaactc ccctctccct 420
gagacagatc acctcaggga aagggtggct gtgggccag cttcagcgga tttaaactt 480

```

cctgcctgcc acttntgaaa aagtgcanca gatctgacaa ggaggattta ccgcacaact 540
tgactttgta aggacagntt gcttctnaag ngagtcctga ctg 585

<210> 6173

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6173

caaaatgaag aactagtatt ttattccatc ttacatccat acaatcctat taatgggagg 60
agggcaatct tcagaattca ggagttctga tattgagaga atataaagga taaaaaaaaa 120
ttctctcata tttaaataaa gaatcttata atgccaaaga ccaacaacaa ggcaacattt 180
accttgaaaa ttgcttagng tcctttatgt gtaattccag gagggaaaat ctgctgcctc 240
attcttatct ttccttctac tcacgaaaat gaagatacgg tctttccata tcaattcctc 300
tatagctctt tcaactcaata attaaagatt tgggaaatat aacctatgtt cttgggtcaa 360
caacttccca agggagaag catcttcagt aactctgaac ttcacaggaa aagggtaaat 420
cttgaagatg aagtactggc aaatatatgt catatccttt tccattctt tgaatgaaca 480
tacatncatc natanagtcc ttggatgnat ccagctggaa agaanggggtg aggtaggacg 540
ttnttccggg catngtactt gaatgatgga tttatc 576

<210> 6174

<211> 597

<212> DNA

<213> Homo sapiens

<400> 6174

aaaaacagga gactatttaa tccatctaaa aatacaaac aggaaatggg gggaaccata 60
ggaaaatcct ccacctctaa cagagcgaag ttactggctt tctgcttgct ccaagaatcc 120
caaggcttga tgtttgaag gaattatctg ttcttcaact actcccagat actcaagaca 180

taagttacac acatctggag aagggttctg ccctgctgaa gctagatggg agctcaatgc 240
 atgggagaaa ggagcatcaa tctagaaaaa aatgatcaaa gaacagctga gtgacagtgt 300
 ggggccatcc caggcaagtg ggctcttggg gctctggtgt agccagaacc catacaagct 360
 gggctggcct aggaagccca ccagccagcc tgtgttcagc tacagcttct gtgttcttat 420
 ttaccatcat cagccacagc ccttgggagc aaagccctta gacgccttct tcaagcccct 480
 gctgggtggg ttcattcatta tcttggcctn ttccaaatct gaatgnaagc ctttgacagg 540
 gggatcattt ggggaaggat gtcagtcncc tggaggcttg gaatcatacc attgccg 597

<210> 6175

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6175

gcgacagccg cactttatct ggagttttcc acctaagcag ctcccagctg agctgcatga 60
 catgtgcaaa agtcccctag aaagctgggc ctgcagctgt gtaaaaaagg ccccccattg 120
 ggcagagccg tgcaaccatt ttaaaaaaag agacagttag agagaaatca ggccccctgg 180
 gagcctggct tgggtggagt gcacatcgct caggccggtc catgtgccag gccactcctg 240
 ctggtttggg ggctgttttc ttctctgatt gtgctttcct ttccaagtcc ttaaaactct 300
 ggggtttag ccaccagaga gaccagacca agtcctcggg gtcaggaggg tatctggccc 360
 ggcggtgcag tttaggggtg acctcacaca cagacacca caacacaatg ctccccact 420
 gctcagcccc gccagaaact cagggtcttc tggcctcgca gccctcgcca gcccttctg 480
 tcccacctnt ggccctgacc tggccccaat cgggccttat gtcacaattc caggganggg 540
 cactggnctt gacacaaaca aaggttttct aaccctnggg gcg 583

<210> 6176

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6176

```

ggagttccag tgggctttta ttgagataaa ttaacaaaaa ccaagatttt accatatttt 60
tggaacctta taaactcagc agactccggt ccatatatgc gtacatacaa cataacacat 120
cccaacaaaa acagagcccc ccccccccc cactggaaca tctgccaatt aagagaaagc 180
caattttccc ttcccccaat gtttctgaaa ttttgagttc ccactgttca cttctcagtg 240
gaactgggtcc cttgtggcta gggacattgg aattctctac catttttact gaacaaaaaa 300
taattttttt tcctgtttca aaaaaggga tagtgacttt gttttctcca ggctcccttt 360
cccccataac caatgtaaaa tacagcagcc tgtatcttaa taaccagcc ctacccctc 420
ccttaccag cattgtctac tggagaattt aaatacactt ctgttggaat ctgtcagctg 480
tggatgggca gaagtccagg tgccaggcta gtcctntgc ctatgactgn gcaacnttg 540
gaccttaact ttaccccaa agatgagttt agatccaaag ggg 583

```

<210> 6177

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6177

```

aatcacagt taccaaaaga aacagtgaat aatttattac atacgtata ataacattac 60
tctaaacact attgtctatg aggtatatct gagaaaattc ggtaaggaat tgcgcggtct 120
gcattgccaa catgcccagg ttcatagtaa agctttggaa ccgtgaagaa ctagaaaaaa 180
gggaagaacg agggaggcag aggaggagac atagagaaag aacctttgggt attagtacaa 240
atcttgttct ttgcagggtt gcattgcaaa gcaccacagt acaataagcc caccaactga 300
ctgtatggag gccagttga agctgaggta ttcacaggaa gaattaaaaa aagcacagag 360
aggtccagac tggctaaatc gttgctttgg ttcaagcaag gcactcgtcc cgtggttatg 420
tcacactttg caagtgaagc atgaggctgg ggggattgct gaggagaggt ctgccaagtg 480
ggggtgtttt ctgngtcang ctgccatcgc tctttctaga tcctctctcg tatgggtgtg 540
gcagtatgga aaatggggaa agtnatgttc acttataggg agctcttctg t 591

```

<210> 6178

<211> 563

<212> DNA

<213> Homo sapiens

<400> 6178

```
acgtgaaaga gtatttattg aaaacatggt tactgacagg aagctcctgg ctgttgtaa 60
atccatttca agaagcagtt tcttggactg gaaggcaagg gcatctgctg ttgttcctc 120
gtggcccaat cccaggcttc atggtgatgg agtgggcaga gcaccctgcc ttcattgactc 180
ttagtagaca gggaccaaga ggaaactctg ggtgggtccga ggtgggtttg agaaatggct 240
ggcatttact ggccacaaaa atcactacag attctgtaca agcaaaagac aaggcaccag 300
aatgtaagtg tctctcctgg gcccaaaatc ccttctcctg ggtaccgtcg tttctggctc 360
caggctcagc catagtata gacaaagtca tagctgctgg gctccttggg gatggggggg 420
tgggcttcgg gaatctggat gttctccagg tccaggaacc cgcagcttca tctncatgct 480
taacaagggt gccangncac ttttgggcaa ctactggac atgtccttcc caaaaaggca 540
cttgnggccg naatccnaat ccn 563
```

<210> 6179

<211> 589

<212> DNA

<213> Homo sapiens

<400> 6179

```
gaaaagacca agtgggtggct ttattaggtt aaatatatca cagttgctac agtgaattga 60
gctttctcag aagctattat tttctttggg tgattggcag gtatagggca atagccagtg 120
gggtgtcagt aatatgccct gtccctgacc tcaaaggtaa agggatagaa aagagagggc 180
gttgacaaac tcattttccc acttcccact catggcttat attatctctg agcatctcgg 240
tggtatttcc tcatttactt aagatgtttt agtcattctg gatgtgcaaa tgcaaggcaa 300
```

gcattctccc actggccccc taacgggttaa ctatcctggc ttaaaatttt cctttgctca 360
 cttccattct atgagtatat cgatggagca gctggacatt agagttcttt ctctttgacc 420
 aaaggagcca aaatgcggtg acttgacttc aacccaaca gcccctgtaa gtagccctgg 480
 ccaaacagaa aggctaactg aatgaagaaa aaaggaagac aattcatctc agtggccctt 540
 tttgacagct tncaangggg gtttgcctaa ggaataacaa ttttcntaa 589

<210> 6180

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6180

aaaacttaaa acgtttattt ctggtagaaa tgataaatac tttgcactaa aaatctggaa 60
 ttcaagtttt cctcgtactt catgctccct ccctgcccc gaaccttaca aaaatatttc 120
 tgtgtagaga gggaaagagc tgggtgcctgc tctggaggca acgtccaggt ccgggaaagg 180
 cactcgtggt ctgtgatctg tctcagtgat gggaggtctc cactcgcccc acaggcagcc 240
 tagggacctt ggccgcccc tgatgagatg ccagcatccc ctcagggcta ggcctggaca 300
 gaggctgctt gtcttggggc attagcacia ccactcacc agagcagtgc tcctgcccc 360
 agccccctcc cagagcagtg ctctgtcagc ccgaatccca aaggtcacca ctgtcctgac 420
 tgctgcagga acaatgtgag gctttatgtg gatcaactgc gcccaattgg ctgttgactt 480
 aatgctcctg gtgggctgct tatgggttaa aatgggtggtt cctgggttgg gaagggaan 540
 gggttacctg naaccnccgg aacnnngctt ctacct 576

<210> 6181

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6181

gtattaactt gcacgtatta atctaaaggt aatgaccttg ttatctggag gctatgagct 60
 agttgaaagc tctagacaag acagctgaca aagatggact ggaaaggagt ctctgagaga 120
 gattttatag gtcacatgaa cggactcact gttaagcaga gcctacttta ggtcttacc 180
 aatcaaagt gtgaccagt tagccgatta atacacactc aattagatta gcaaggagta 240
 acatgctgtt tcaagtaaaa aactttgggt gtgaaattgc agctgtttgg agccatttag 300
 tagaggcaga gggcatgcag catggtcagt acagggtcct ggggagacgc tgtaggagag 360
 aaggtgcac ccctcagcat gctcctgcag tgcccagcat cctaaagtac tcggtggcca 420
 gcagcctgct ccagagactc tctcaaacgg ttctgttggt tgaagtctcc catgagatcc 480
 tnccagcac atgggagtac aaataccatg caagttcgtc tggtagacac ccagcaaatt 540
 ttnggcactt catganaccg tgttcctttt caaaaggcag a 581

<210> 6182

<211> 586

<212> DNA

<213> Homo sapiens

<400> 6182

gtagtttaac acagtgatca gaaagctcac agttttctct atttttgaaa gaagttttct 60
 tcgtagattt ttccatttgt gaaaattctg tactgttttt gaccttagca acattttttt 120
 tcatcgcaat aatttcatct gtatctcctg agtcatactc acgatcattt ctcataatat 180
 catcatcact atcatggcaa gagacacgat ttttgatacc taaacctatt aaagaatgca 240
 gtttgtgaac gcctgatttg aaatcatccc ttacaacttc aaaaggatca ctttcagatt 300
 catttattga ggggttgtga gttctctgta agttttcctc tttcgcaatc atcattctca 360
 attcatcttc agaatcagta tcatcatcag aaatgctgtt tctcttcttg gcagtttcca 420
 agccagaagt cttaaaaggn agatttttaa gtttctgagt atcagaaaca ggtcnggaga 480
 tgatttagaa gngtaatgg aatcncaagg tcttttttgg gcacccggtg ctggggtnaa 540
 ggggggccct ctaataccct ccngggcctg gncccatggc caaaac 586

<210> 6183

<211> 566

<212> DNA

<213> Homo sapiens

<400> 6183

```

gagatgcata ttttccttta ttgctgaatt aatgaggcac caataatctc aaaaacacaa 60
gtcagacttt attctgaaaa taccataaag agacaaaaag agttagtcaa gtattcttgc 120
ctgctggaga cacagaattt caatagcacc ttttttaaaa aaagacatga acatttataa 180
aattgcagaa catatcttac atattcacat ataaaatcat gaaccaataa taatccggat 240
ggaaaaactg atctgtttca tcaacatcaa taaacatttt gttgagagtt tgttccacat 300
attatacttc cctcagtata ttagaagtac ttcagctttc tatttgaagt ggttttccta 360
aaaataacct tttcccctgc tcaggataac cagctattat tatagtatac atattataat 420
aacaaggnat atgtctttga cctcatatat gactnccag ttgctcagga atagattact 480
ttcatacaca aatgggaaaa gatgtcaata ttgatgatag tatcgaaaaa gtggagctac 540
tttaactgng taaattaacg atgnca 566

```

<210> 6184

<211> 571

<212> DNA

<213> Homo sapiens

<400> 6184

```

gagatggagt ctgctctgt caccagggt agagtgcggt ggcgcgatct cggctcactg 60
ccagctccgc ctcccaggtt catgccattc tctgcctca gcctcctgag tagctgggac 120
tacaggcgcc cgccaccatg cccagctaat tttttgtagt tttagtagag acagggtttc 180
accgtgttag ccaggatggt ctcaatctcg acctcatgat ctgcccgcct cggcctccca 240
aagtactggg attataaggt gtgagccacc acgcctggcc aataaaagca ttttaaaata 300
ccaaatattt taaaatacca aataatcaaa aagtagttgt caacactggc caaactgcc 360
aagatgttaa cattagagga ggcttgaaga agaaagaagg agggaggaat aaaaaccaag 420

```

gagggagaag agctacatta aaaagagaga gagatgtgaa atgaatccac aacgtcatca 480
tctaagcaac aaggnacctc ttcattcctgg attctggcac ctatatcata tttcnttaaa 540
atggnatgaa tcaanttttn caaatggcan g 571

<210> 6185

<211> 568

<212> DNA

<213> Homo sapiens

<400> 6185

gtagagacag ggtctcacta tgttgcccag gctggctctg aactcctggg cttcagtgat 60
cctccctcct tggcctccca aagtgcctggg attataggca tgagccactg tgcccagccc 120
tcataaagtt ataatatggt agcctagggc tggctactcaa tatgctgtgc ctgcgagtat 180
aatatTTTTT cacactcaag cttgttagct tttcagacga ctttgggttt atagtTTTTT 240
aatgtctgcc agtaaatacag tcaaatgcaa atgctaaaga ctgcttcttc caatatatca 300
ttaaactcat gaagacataa aaatgatcta ttcctgctgt caatataaaa tatagaaatc 360
ttagacctaa aagtcttgca tatactttca ataaaagtag aaataacaga agttactgag 420
tttgattaag agatgactcc aaaaccttta acttctgaag ggatcatcta cagcattggt 480
tttaaaacta gaaaataaga ccaacaaaaa tatccaaata cnggttggtg aaaaactatg 540
ccatctatca attngaattc aaaaatcc 568

<210> 6186

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6186

ataaagaata tgcaatccat ttgggattta ttgcatttaa agaaaacaga ttaaaacagg 60
tatgataaat acagtaagaa aataacttta aatttcaaac aaaacagtga atcagggaca 120

gaattcagtc aaaaagaata agcagtgtaa aggcaataaa gtaataaaat cagtttagtgc 180
 ttaattagat atggcagggg aaaaggggtg ggagggggag actgagccta tctcataatt 240
 gtttcccagc tatatttgag gactgaagtt acttttagcaa gtatgttttg taacaagtag 300
 aaatacaata aagatgtaaa ttgcttttat ttaaaggtta aagttatttg cttagtggta 360
 cataaaaggc ttcagaaaat tcaagtttaa caaaaaatgg aagtgtaatc aaagaaagtg 420
 cacttaaagc tgtttgccag caattaaaaa gtagcttcta tacagcttct attagatgac 480
 ttttcaatca caaaaagagc atagtcataa aaaccattct tttcaaaagt gccgttttaa 540
 ttttaaaata aaccnaaata cccccaatca tgn 574

<210> 6187

<211> 570

<212> DNA

<213> Homo sapiens

<400> 6187

ctactttcca ttaacaagg cacttcaaaa aattctgttc catgtgttca gcctcttgct 60
 cccaatttct acccctgtca ttaaaagtca ttctttccct tgcttatggc atgtctagct 120
 gacagagggc aggacaactt ttcaacaggg aggtcccact ttaccctaa tcttggaat 180
 gccattccca tgagaggctt tcctaagatt ggtttcagaa gtgtcacagt tggggtcaac 240
 aggcagggtc atgttctgcc ccctctctag tggcattctc tctggggaga aagatcctag 300
 gctttctcaa ccatcagtgg atcactcaaa acaaaaacaa aaagaagcag caacttaca 360
 ttctaccac atgtatcgcg ttcattcttc tattcttagg tcctaggagg gtcattatat 420
 aaagaaatga atgactagat aaatgactgg aaataatagg atgaaaaaca tcctgtcctt 480
 caggagtcc atttctagcc nggagactga gaaggcattg acagtgcaan tgcaagtgc 540
 gtgaangaac tntangctca ngggcccagg 570

<210> 6188

<211> 570

<212> DNA

<213> Homo sapiens

<400> 6188

```

gcaatttcat agtttttatt cagtggactt aaagccaaga aaccatccca ataattattt 60
acaatttaat aactgaatga ttatcagatc gtgttatact gcaaaactgt tcttacacca 120
tgaatgctga tgctgtgaac tttggatgtt aaactggtaa aagctggagg cttcaaattg 180
catatgcaaa tgtaacaaa gcctgaggac tatgaagaaa gaggagtttc taccactcgg 240
catttatagt ttttatatgc attgcagaag catggggaat taagtgatct ctgaaaaaaa 300
tgctttaaaa aactgagtat acatatagcc tataaggtaa aaateccaagt tacaagtgt 360
ttaaacactg gcaactatgt tatcagaggg aatactgaat tatatatata cataaactgt 420
cattaaactg tgattacatg atacttccta ccacagctta ttagactgtc aacagaagat 480
attcctggng gctctctaag ctccaggttt aaaagaatta agatcttccc cttggctcaa 540
agctaatacag tatcattcta tacctaaatn 570

```

<210> 6189

<211> 342

<212> DNA

<213> Homo sapiens

<400> 6189

```

gctatttttg ttttctctcc tctgtgttgg tcgcctgtct cgctccctct catgctctct 60
ttctctcttc tattttgtct ctactattc gtgttttgtg tttgtttcta gggttggtc 120
aattggtaag ggtgggattg aatttgctga gcccctagt gtaacagtct tctgcctttg 180
tgggtaaaga gtggagaggg gggaggggga cgacagacag acatcccttc ttcccacccc 240
cctccccacc tgccccccgg caaccgaggg tgcccatttg gtttggtttc tattgnacag 300
acatctnang atggctcaca taggcggnaa ggangaagn cn 342

```

<210> 6190

<211> 569

<212> DNA

<213> Homo sapiens

<400> 6190

```

caaaagcact ctatatatgg agtggcacca gatttaacct atttaaaata aaagtcatac   60
aacacaaaaa tatatttctg tgtcatgccca gctcattata taataaacat gttatgacag  120
ctaattctac tagaattact gtgaatactt acagtacact gaattttatt ctttcacatc  180
catttttagtt ttaaagagag gttcacgagt taaatgacaa tggcatggct atcttgaatg  240
gggtgcaaac atcattgggg aatgtggatc caattaatcc gaagggtccgg tgtgaccggt  300
attagtttta tagacaagag aagggtttta gatagggtga aatgagctat cagtggtttc  360
aatgtctcat gaaagaaaga aatgcattaa aaaaaaaaaa gtttgtcaaa catccgtgtt  420
atgcaattga gtattttctt tgtaacgtgc aagaaaaaat atgtatacat ttcataagta  480
tctttagaag tattttgnet taataggtac ttacagatta tncaaggcan aactgnttta  540
atgcagnttn ctacaaaggn cttaaaatg                                     569

```

<210> 6191

<211> 570

<212> DNA

<213> Homo sapiens

<400> 6191

```

aagccccga gacgggagtc ttgctctgtc acccaggctg gagtgaaaag tacagtgcaa   60
tttgctaata cacatcctgc acatttctgg agaattataa taaacttata tgcaagtga  120
gcaggcctcc tcttctgtaa tctctcaaaa catctggaat atattgcata tattatgaaa  180
gggacatctt tttcacagat gccccaccgt tacaacgtgt acctttgctt agtttaaaaa  240
ttgactttta tactttatgc aaatagtgcc tgtcccaaata tctagcatgc acatggatct  300
accaacaaaa aaactaagtt ttcagtgtgt gaacataaac ttcaaattaa acctctgatg  360
ctttagccca tgtatcaatt accaacagat tttcttcata aatgtctgca gaccacattc  420
atgatttcta taagacagaa atagagcaga taaactatac tgnatatgct gagtacagaa  480

```

tttgtgggaa cataatgctg caaatgaaag ctacaaacac tctgnaaata gcttagaaaa 540
actagtaatt gaaatcncca agtnccngct 570

<210> 6192

<211> 568

<212> DNA

<213> Homo sapiens

<400> 6192

gagtcagagt tttgctcttg ctgcccaggc ttgagtgcag tggcgcaatc ttggctcact 60
gcaacctccg cctcctgggt tcaagtgagt ctctgcctc agtctcctga gtagctcatc 120
tttcttcaca tccacagagt acataccatt tcctgctgtc aggcaaactc tagaaatttc 180
tacaaatccc agaaagaatg ggtaagcagc ccctgggtcc ctctcctagcc cttaccttg 240
atgacaagat ccacatagcc gtgactctca tcaactggta caggagtgtg tggcctgatg 300
accaggctgc catcaattcg ggtggagagg tagatatgtt tgcctgggga ccgtgcagag 360
agctacataa gggttgtctg tgatgtgctg catccctcaa aatactcaaa gagatttgag 420
agaacaagat gtcttgcttc tgctgtggtc ccaaggagct acaaggcagg gaagattgcc 480
ccattgagcc ctcaagttga tctcttataa gcgccccagt tgaggaaaca cttatttccg 540
cgnttinctgg cantactggc agaacctt 568

<210> 6193

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6193

cggcaactat aggctttatt ttcttgccaa ttctttacag aactgtaagg cagttgcttc 60
tttcttccgt tgtagatagt cttctgttat tgctacaaac tgggattaat tttaagctt 120
caaagttaca ttattgccag acgcagtggc tcatgcctgt aatcccctgc actttgggag 180

gctgaggcag gtggatcacc tgaaggtcag gagttcgaga ccagcctggc caacttggtg 240
 aaacactgtc tctactaaaa atataaaaaa ttagccgagc atggtggcag gcacctgtaa 300
 tctcagctac tccggaggct gagacaggag aattgcttga acccgggagg cagaggttgc 360
 agtgaactga gattgtgccg ttgcgctcca gcctgggcaa caggagcgaa actccatctc 420
 aaaaaaaaaa aaaaaggga angaangtta cattattatt gggaataaat atctgcattt 480
 ccttaagcct ttggcaggct atgttaccct ctatntttgg agaaggacct tgaaaagtga 540
 nggcnnngcc ttcaccttat acctgcnttt ttt 573

<210> 6194

<211> 502

<212> DNA

<213> Homo sapiens

<400> 6194

ataaaagccc ttggaatggt caacacttct tatgaataca agcaaattaa gttgtttaga 60
 ttcaatgaca ggctgtcata ttgcaccata caaaaacaaa tticatcaaa gctttcagtc 120
 ttacagtata tacagcaatg cattcatatt gtaaaagggt atttttttgt gtacagatga 180
 agcaaaacaa tttttttact ggctgaaaca aaaagtggaa caaagtctcc aacaatagag 240
 gtcagtggca cctactcctg tgtggctttt gtctctttac tgagcaagag gcttgtttta 300
 ggttttcttt gncctctgtt ctagttcatg ctgggtgttta ataagacgtt ctatttctgt 360
 tccaagtgtt tgnagatttt ctttcaaagt aatatttttt agtaacgtat cctccaaaac 420
 agcctgtaat tttcggttga tttccaaaga gagctccaat gttaatccat tggcagctgg 480
 atgggatgta tataannnnn nn 502

<210> 6195

<211> 569

<212> DNA

<213> Homo sapiens

<400> 6195

```

aaaaggcagg caggaaccaa catttattaa aactttgctg tgtatatatt atgctggaca 60
gctaataaca tcatattgta attcctactg aatacttttg ctcataagag ttttttact 120
acagacaaat tgggtaaaat caaaatctga cattacagga attactcaag tttcaatgcg 180
tactgtagc taagccagtg aactcctttg ttctgctgag aaagagcaag aagaatgaat 240
cttcacagga ctactagaaa cttcttccca gcaaggatg aggaagccct aagtcaatgg 300
tgtaatccta aatcagggtt tgaaaaccca cctaacaggc agagtgaat taacaggcaa 360
agtgaatca ggcttcctg ggaaagtctc aataggaaac aacctgtaga tgagtcatt 420
ttgaggcca ggtgtttctt aactctctcc aagtccttcc caccctcaga atccagcaga 480
aacncnaaag agaacttggc cacttcttct tggctctcct cttatccttg gctttacctt 540
tggctttgga aacctgntat nacnttggg 569

```

<210> 6196

<211> 577

<212> DNA

<213> Homo sapiens

<400> 6196

```

gctgattctt tttctgcatg atccttaaaa gttgttactt cagggactct gtccttagcc 60
ttctttaatg tctacagatg atcaggatg ttaatccatt tcagtattcc aactaccacc 120
tggaagatgc taataacttg aaaaaattgt cttcagttca tatctgtctt cagaaacca 180
aatatatgtg tctcatacat tcctaacaac atagttatat cagatcaaca tatgaataac 240
tgaatcattg tctgccaacc taaagtcttt ggtgtatata ctgtttttaa tgctgtgaaa 300
tattataaat atagtactg attctactgc taagtatcat atacttaa at ccctctgatg 360
ctagtaaaaa gaagaaaagg aaaaatcacc caataatttc aatgcatatg tcttgctttt 420
gccataaaat atgcttggag gttaaatttg ggaaagtaaa aatgccaggg tattaagtat 480
ttattggatga ataccattat tccnccaact acagcttaaa agaacccta tgtantgngg 540
gnccagagtt ngcacttcta tacctagncc ttggaag 577

```

<210> 6197

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6197

```

cttttctttt ttttttttga gagggagtct cactctgtca cccaggctgg agtgcagtgg 60
cacgatctcg gctcactgca agctccgcct cctgggttca caccattctc ctgcctcagc 120
ctcccgagta gctgggacta caggcgccca ccaccgcgcc cggctaattt tttgtatttt 180
tagtagagat ggggtttcac cgtgttagcc aggatggtct cgacttcctg acctcgtgat 240
ctgcccacct tgacctccca aagtgcctggg attacaggtg tgagccacca cgcctggccc 300
acagtacata atgttaatag tacctgtggc gttgtcacia gtggaaacca gatatttttg 360
ttgcagatat cttgaaataa tgtcaatgct tataatcact ttgatattat agttgttatt 420
acgcctgcac cagatcttat ttattggata aataaataag cccacatact tggcattttt 480
atatttgata actattatgn caatataatg gattncnttg naatcctata aacccatata 540
tagccttttt taagaactcc tccaattttc naaa 574

```

<210> 6198

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6198

```

gagaatgagt cttgctctgt cgcccacgct ggagtgcagt ggcacaaatct cggctcgctg 60
caacctccgc ctctgaatt caagcaatcc tcctgcctca gcctccctgg tagctgggac 120
tacaggtgca caccaccatg cctgcctaata ttctgtactt gtagtagaga tggggtttca 180
ccatgttggc caggctggtc tcaagctcct gacctcaggt gatccacca cctcagcctc 240
ccaaagtgct gggattacag gtatgagcca ccacgcccag ctgataggag agctttgatg 300
gaaaccccat atgtgttgct agagtgtgag ctccatgagg acaggacgtg gccaccagcc 360

```

cccatggcac cccccgcatg gtgctgggtg ggggaaggca cttggcaagt gtgtgcagat 420
 tgcattgacaa ggtgcaccca gccttgctcc aagaaatcct gagcacacaa ctgcagggtgc 480
 acaaaagatg cagacagntt catgtgtgca cacagacagn tactnctttt tgcagcctac 540
 ttccccagga tgancacccc ctttggaaan anaa 574

<210> 6199

<211> 542

<212> DNA

<213> Homo sapiens

<400> 6199

ctggtcaaac tcccttttta ttaagggtta tcaagctgta cacggtecct accctgctcc 60
 gctccgagtt cgggcagcgc aattcaccac tctcccaaag ccggaccaca gctgggtgag 120
 ggggtgggaca gagagtagga gcagtcccag catgcagtgc agcagcccaa agcctcgggc 180
 gaggcacgc ccttcacccc ccttcagggc acagcgagat gcgggccaga gctcttttgc 240
 tgggacgtac acagccaagg tcaccctcca gcccggtctg tcccatgtgc aggtgatggg 300
 gggtacgata agcagcaatg agggcccagg aagacctcag tctcctgggg gcccatccta 360
 aaagatggca agggcagcaa agtattttcca tcctgtcctt acaatttaga aaccttcttt 420
 tttagtgtca aaatatagcg ttgaggggag ctggacgcta gggctcttacc ctaacgcaaa 480
 gcaaaaagcc gaacngnacc ggaaccagcg aacngaacan gggccagcng nacacacang 540
 gc 542

<210> 6200

<211> 567

<212> DNA

<213> Homo sapiens

<400> 6200

cctactgaat aaaaatccat ttattttaatt tagtcagtgg cttttctttt taatttcaac 60

ttttatttta aattcagggg atactgaatt tgcttaggac aatggcctac agctgcatcc 120
 atgttggtgc aaaggacatg atttggttct ttttttacgt ctgcggagta cttcgatggt 180
 gtatatgtcc cacattttct ttatccaatt cactgttgat gggcacctag gttgagtcca 240
 tgtctttgct attgtgaatt gtgctgtgat aaacatacaa gtgcatgcgt ctttttggtg 300
 gaatgatttt ttttcttttg ggtgtatatc cggtaatggg actgctgggt caaatggcag 360
 ttctgttttc agttctttga gaaatcttta aactactttc cacagtggct taactaattc 420
 acattccctc caacagtgtg tacatgttct ttttctctgc agctttgcca gcatctggtg 480
 gttttcgact ttttaataat agttggctca ttttctaagt gaatggttgg tctttactgn 540
 tgagtattgg gagatatntn catctan 567

<210> 6201

<211> 571

<212> DNA

<213> Homo sapiens

<400> 6201

ccataaagga tcttccttct tcccgaagt agagtggaga aaacaggaaa aaaatacctt 60
 cagcttaggg tggaaaagga aggaaaaccc aagatgagtg caggtgacga ccgggcggcc 120
 cccacagggt ctctgcagga ccacaggagc caagactcag gcataagagc atcacctttt 180
 cagcagccaa ggcggttggc accttccctt ccatggtcac tggaggctgt ggggccatag 240
 ctgcagagaa cgccaggcggc gggagaccct ctcagcctct cttcttccaa gctcagtttc 300
 ttgagatctt ccaggatacc cacaaaaaaa gggggtgaac ctttaacaat gccccagagg 360
 agcttcgttg ctacaggggg cctcctgacc cccaaccag ccctctcagc caggcctcag 420
 gaggctagtg tgacctcaa actcanagcc cccgtgagac acagggccag ccagtcccat 480
 gccttgcaaa agggaaaggt ccttccaagt gtggattttg gggctnacct ttgnntttcc 540
 tggantgnct tggcanttag ggaaggaatc c 571

<210> 6202

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6202

```
ctatagaaag tttcatctag ctgtaagcaa agtcttttca acaacaacaa aacaaaaccc 60
tccaggaaaa actatatggc tgtgtgagac aaataagcaa ccatttgata gtgatttttg 120
cctaaatttt aaaataaaaa tgtccacact cttttgttaa aacattaagc ctctgtcaaa 180
aatgtatttc ttattttagg gtacaggatt aaaggacaag atgatactca caagtaaaga 240
aaattttaca gaaaaaactt aacaaaagtt tcaataaaag tattgtaaca ttcaaacttg 300
acttataaca aaagaaacaa gattgcaaac aaaaatgttt acgggggtttc caaacataaa 360
taaatgaaat agtgtttagg cagtagggct catgctgatg gctagcagga agttaacaga 420
gtgtaactta cttggaaaaa atctttaatg tcaaataagc ccaaattatg gactgcagca 480
atttaatcat cactggcatt tttcttactt nccaaataaa gccttgatta accattcatc 540
cctatatact catcccttac ttcagaaaat ggn 573
```

<210> 6203

<211> 570

<212> DNA

<213> Homo sapiens

<400> 6203

```
gagatggagt ttcactcttt ttgcccaggc tggagtgcaa tggcatgatc tcagtcact 60
gtaacctcca cctcccaggc taaagtgatt ctctgcctc agcctcctga gtagctggga 120
ttacaggtgt gtgccaccac acccggttaa ttttgtattt ttagtagaga tgaggtttca 180
ccatgttggc caggctgatc ttcaactcct gaccttgtga tccaccacc tcggcctccc 240
aaagtgttgg gatttatagg catgagccac ttcacccggc cccatccttt tatttcaact 300
tgaaaagaac taaacccaaa accagcataa aaacggcaat aataaaaatc agagcagaga 360
taaacaata caaccaacaa aactaagagt tggttctttg aaaagatcaa ccaaactgac 420
aatccttag ctagattaag aaaaaaaaag aacattcaat aactacaatc aggaaatgaa 480
```

aganggacat tactaccaat acgacngaga ttaaaaggat tttagagaat ntatgaagaa 540
atggtgcctc caanttaata cctaaaagaa 570

<210> 6204

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6204

attttgagac gtagtctcac tctgttgccc aggctggagc acaatggcac gatctcaact 60
cactgcaacc tccgactcct gggttcaagc gattctcctg cctcaatata ctatgagtag 120
ctggaattac aggtgtatgc cccacgccc ggctaatttt tgtatttttt ttttttttaa 180
gtagagacag ggtttcacca cgttggccca ggctggcttc taactcctga cctcaggtga 240
tctgctgacc ttggcctccc aaagtcctgg gattacaggt atgagctacc gcaccagtc 300
taccctcacc atctagattc aacttagttt gcatgattat ggagcatgta tttagactcc 360
agtatcagat tagggatgac gacggatggg gtgttaaaac aagttattta acagattcct 420
aaatttaaaa ggtttatata accacattct aacagtatac ataaacacta caaaaaagga 480
caaagtattt tgggggaacc agatccttta aacatctgga ttctggtaat ataaatctga 540
ntaagcagct gattttagat tacaattcaa ttgaaatttt tgncgaa 587

<210> 6205

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6205

agataagggtg gacacgtaaa agaaagcaga gaggaagggtg gaaggggtgt ctgtgatgag 60
ttagaaaagtt agtccttttt ttaaataagg aaaggaatgt gagctgggtat tgataacgcc 120
tggtattgtg gcgtgtctgg gcatttaaca aaggcaaaaa ggaaaagagg agaagaagggt 180

aaaaaggtgg ggggtactat caattaaaga ataaaagatt gatcgggtta tttgaagaga 240
 aacctcatca tatcccacac caaccgtct ccccttcctg gcagttaaaa gcctgggtgg 300
 tgaggcaagc ctgtctggat tcaaacggca gtgacgtctt gggcacgttc tgctctctga 360
 acctctctgg ggtgttcagg gctgcggtga agaaccgag tccagagtca gatgctgccc 420
 tagtttgaat ccaggcattg ctatttactt gctgngtgac ctggggcang tggcttcac 480
 tctctgggcc tcaattcctc atctgtaaga cnggctatta ccacaccttc ctcttgatta 540
 ctccctgtgg ganggaataa atgatnaatc cctggaaggn gtttgnacca n 591

<210> 6206

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6206

ggcaacacag tcttgtcttg tcgcccgggc tggagtgcag aggcgagtc tcagctcact 60
 acaacctccg ctcccaggt tcaagcgatt ctcatgcctc tgcctcccga gtagctggga 120
 ctactgggtg gcgccaccac gccctgctaa tttttgtatt tttagtagag acggggtttt 180
 gccatgctgg ccaggctggg ctcaaactcc tgacctcagg tgatccactc acctcagcct 240
 cccaaagtgc tgggattaca ggcatgagcc accatgcctg gccatacaca tcactttgaa 300
 acctgttttc ctttccaatc taaaaatgag ttcggttcta tttcctgagt cttcctctga 360
 aggggtggaga cacaggggccc tgatgggaaa ggtccaggcc tgagaacctc ccggcacacg 420
 tnccggccac taaggggaga acacttacca cccagtccgg ccaggacccc ctttaacttca 480
 caccagtcc ccaaaaagcg tgtccagaac atgaggacna aattcatnac cnggaaccgg 540
 tcaagttctg ggccacaaaa tctccaana cttggccttg aggacgcccc c 591

<210> 6207

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6207

```

ataacaaccg ctaatcagtt tattaaaata gttgactttg agcatctgca atggtgactt 60
ccacctcaat tcctggctca acactgatgg aagtcaactg cttacaatc tcagaaggac 120
tgtgcaagtc agtgggtagc ttgtggattc tcactctggaa acgatcccat gtctctgaac 180
cttcaccaca aggagatttt cttatagtga ttctcaaagt cttggcaggc attcaaactg 240
gtcccttcac ttagacattc ttttcctttc ctctctgaa tccagtcagc acacaccttc 300
tccagggatt ttacgctgcg gatcattaga gggattcgaa tttggtgaat ggtcacctcc 360
agcttcacag gtgttttctg gtatctttta aagccttggg gcagtgcggc ttctggctga 420
cttgttcgga acagcgatga gtgaggagca ggaatggcag actgcaactc tgcaccactt 480
atgactgcat ctttctcaaa gagctgnatt gcttcntttt ggttggtggt ttttttgaga 540
cagaaattca ctcttggtgn ccagcttgga ntgcaatggc n 581

```

<210> 6208

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6208

```

gtcatttgaa aagttcattt attatatacc aatatacact ttctgtaata aaaaagaagc 60
ctccaatac attgagccat cttataaatg aaataagaaa ataaaatttt catctgttta 120
caaatggggt taaattaatc agcacaagct atcatatgta tgtctgccct gcagtatata 180
tgaattttta tcctggttat gaagaaaaaa atggtgcttt attatttggc actataggat 240
gctcttgaac attcagaaga tacctttttc cactttttat ttttgtatac tttttagatg 300
agtgaaaatg taaatatatc ctaaagatgc tatttggcag atttttttca aataatagta 360
gctcaaaagt acgtgtatga tacttgtact tcataattgg ctttactaaa atataaaata 420
cacaagtgat ctactatga tttgaaaaaa aggtagtga ctncagaagt ttaagctgt 480
gagtaggaat ttttaaacc attttatggt aagttggtat agaagtgagc cagaatggat 540
cgggtgcatt tcttcnann ggtagccctt atccttttcc gggnaac 587

```


<210> 6209

<211> 582

<212> DNA

<213> Homo sapiens

<400> 6209

```

gagacagagt ctagttctgt cgcccaggca ggagtacggt ggtgcaatct cggctcactg   60
caacctccac ctcccgggtt caagcaattc tcctgcttca gcctcccgag tatctgggat   120
tacaaatgcc cgccactgcg cccagctact ttttgtatit ttagtagaga cagggtttca   180
ctgtgttggc caggctggtc ttgaactcct gacctcatga tccaccacc tcggcctccc   240
aagtgtctggg attagaagtg tgagccactg cgcccggccg agaaagagtc ttttttctaa   300
atcctttctct cttttcaaaa ttctcaata gaactcatca ccaatatatt tcttcatggt   360
ggtatactgt gtagctacaa ctgtgaaata actaaaattc agtatcagag tcttggattt   420
acaatactgn attttttcac agatctcttc atccgcttaa ttttcttccc taagatttgg   480
tgacttgctt taaaatatac cggaaatata tacaancntt tnctaacagt aaaccagccc   540
caaaagcttt ttacaaggcc naactggatt ttccttccaa cc                       582

```

<210> 6210

<211> 571

<212> DNA

<213> Homo sapiens

<400> 6210

```

cctgagacag cagagcataa gtccttttaa ttatgtgttt gaaaaatgtc acaagtcaaa   60
aaaggaacac aaggcaggct ccgntccct ccacccccgt gaggagccct tgtccatttc   120
agccttgacac tcanaaagac cccgggggtc ttgtagttcc acgtgcttca tgtttcgngg   180
tatctgtcan agccttaaaa caggcccacc cactactgng aaatttcaag gaaataactg   240
attcagttaa ataacagtcc caaggtagac ctggtctcac aggtgaccac ccgnttaaat   300

```

ccagagcctt cttttctgtc caaagccact gaaatttgat ctcttccttc acacattccc 360
 aggtccccc aa tatgccaccc accttctgac aggtggctac aggtctacac taatggaagc 420
 tctgctaaaa acatntccac ccaacccttc tgccaacgag gtcaagctgg caaggcatnt 480
 gntaagcccc ttaaactggg canccgcaag gtattgcnc canticcggg acccaaacia 540
 tacttcnngg actttggacc ttctttcttn a 571

<210> 6211

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6211

aattttttta aacttttatt ttaggttaca ggggtgcaa at gcaagtttgt tatatatgta 60
 aacttgtgtc acagagggtt gttatacaga tattttgtca cccaggtagt aagcctggta 120
 cccaatagtt atttgttctg atcctagttt ctaggatcct gatttctagt ttgtgaaga 180
 atgtcggttg tagtttggtg ggaataacat tgaatctgta aattgctttg gcagtatggc 240
 cattgtaatg atactgattc ttcctttcca tgagcatgga atagttttcc atttgtttgt 300
 gtcacctctg atttctttga acagtgtttt gcaattctca ttgtaaagat ctttcacctc 360
 cctgggttagc tgtattgcta ggtattttat tcttttgtgg caattgtgaa tgggattgtg 420
 ttcttggttt gactctcagc ttgactgtgt tggtagatag gaatgctaga agatttttta 480
 atgtgatttg gattctgaac ttccttaaag tttttttatc acccaaggag cttttgggac 540
 gtctatgggg ttctagaant aaatctgccg ntgcaacagg n 581

<210> 6212

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6212

gatgggagaa ggggatcacc aaatccttca caaatctaata aactatggat cttctcccta 60
 gaaaaaaaaatg gacatatgta catgcacaca aaccacaaat tttgtgtgta ctctcaaaaa 120
 tctgggctcc aggttaaaaa ttcctatggt aagggaagag ctagtcactt tataaagggt 180
 aagggtgtaa aagtatatta agtttccctt gcacatgatg catcatgcag gaatttaaca 240
 acaacaacaa aaaaaaaaaac ctgaagcctt taaagaattt ctcattcttc tgcattttg 300
 atttcaattt gcttgcctatg tgaagtagtg gcttctttta tgtgttgat aatttcttct 360
 gtccttttagt gtaaaattaa ttatgactat gattttaaag cttcagggtt tttaaaaaac 420
 catgtttaaa taaaatatta ggtaagcaaa aggtgaagct tacaaggaag gtgtaggaat 480
 tacaagtgga ggcaaaagat catgttttagc cattctatgc caaaatttag aanataaggc 540
 tnattggccc aaaagcctt tttggttacc gggggcctgt a 581

<210> 6213

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6213

gagacagggt ctcactttgt caccaggt acagtgtagt ggtgcaacca tggctcactg 60
 cagccttgac ctgacctct gggctgaagt gatcctccca cctcagcctc ctgtacttta 120
 attactaaaa attcttttagt gcgggtccac catttgcagt tttgaattat gtgtctgaat 180
 gccacaatga cccactggca tttccaatag gtcatgtaga ctggtgagat ctgccagaac 240
 tccacacagg gacagccgga gaaatcagag atgttcagga gcaaagtagg cgcacagggc 300
 tatttttggtg aagtttcaat ctaccagtg gaaggaatat tagacacatt cgctacggct 360
 ccaagagcat gagtaagaca aacacagaca ggccgcaggc aggcagatgt gtgagtgggc 420
 ccgcagaaga atgtccagca ccagtgccat gccacaatgg ggtgcacngg ttaaagacac 480
 agggacgctn tgatggctta atggcaancc tccaaccagc agcttcaagc anttntacgt 540
 ggaccaaaca nttcatgang gggcctgctn ccaa 575

<210> 6214

<211> 567

<212> DNA

<213> Homo sapiens

<400> 6214

```

gagtttggct atttattgat gccacacaga gggaggttat gattacagtc tggttttaag   60
tactgaaata tccaccaagg tacccttga ggaggctggg tagaaggga aatggcaaag  120
cagcacagag atgcaggag ggcaatgggc tgggccgtgt atgtcataca attattttgg  180
aggacaatga tgggtaggat tgtgctttac ccaccatgtt ttttagtaac ataacttaga  240
atactacttg aataagcagt acagacaaca ggagtagcat caaatatgtt agctaggttg  300
taacaccagg cagttcatgt catgtggcct ctccttcaa agtgaatcac tgtggaccaa  360
gcaccagaaa catcgtcca aagattcatc ttgaagtcag aaaggagaag agctaagacc  420
tgcactctct ggagtagcag tgtgcagctt tcaaagtttg gaagatttta agtcaactaa  480
atgggatggg attatctaaa accatttaac ctttacaatg gggttcanaa actggatgaa  540
nggtttcana acnntcctgn ctntttg                                     567

```

<210> 6215

<211> 509

<212> DNA

<213> Homo sapiens

<400> 6215

```

cttttttgag atagggtctc gctgtcacc agactggagt gcagcggcgc gatcacggct   60
cactgcagcc tcgatctcaa gcgacccctc tgcctcagcc tcccaggag ctgggaccac  120
aggcacagga caccacgcct agctaatttt tttgtatgt tttgtagaga tgatggtctc  180
gccctgttgt ccaggccggt ctcaaactcc tgggctcaag taatcttccc tcctcagcct  240
cccatagtgc tggttttaca tgtgtaagcc attgcacctg gcctaaattg gctgnntcat  300
ctcctgggtg gagagggttg aaagctggga atacatttcc caggccccct gcagctaggc  360
ttnggggtgt gaattgattc tgccagttag ggggtgctcac gtgagacttg ggaaagtgga  420

```

aagaaggcac acganttttg catctttttac agaccttnag gacaataaan ggacctctng 480
cnaangggaa ccactttttg cnaaaaggt 509

<210> 6216

<211> 585

<212> DNA

<213> Homo sapiens

<400> 6216

aatgatacca acacttccat gtacattggt ctggagtttc tcaacagcag cactatatac 60
attatccaac agagattcaa cctccacaag ggcaccattc tctccaccta ctaaagtctc 120
cgggtgataaa tccatatcat cgagcttttac ttctgttgct tccactttct ctgcttttat 180
atctactaaa agatcatgta cttccacatg tacaccactt cctgggtctat ctgaatttcc 240
aagaatatca tctgacactt ttgttgacat gagtaagtct cgagtatctg tgctgacagg 300
gtaatcggtc tcactttctg ggctctggct ttgtgaaaga tcttctatct ctcgaatttc 360
cattccacct tttgctcctg ttgtctgtga tgaaagacca gagatgggtgc tcacattccc 420
tttctttccc tttttaatgn tttcctcctc tggctttgat attcctcata cattttggct 480
agggattccc tatgagctta taagngacct tgggaatggg ctattgaaag ggatcccccc 540
aaattttcaa gcctnccatt caaaattaat ggggtggatca aaana 585

<210> 6217

<211> 525

<212> DNA

<213> Homo sapiens

<400> 6217

gagacagagt ctcattctat caccagggca ggttggagt cagtggcgtg atcccaggtt 60
caagtgattg ntcaacttcc acctcctggg ttcaagcaat tctcctgaga ggcggaggtt 120
gcagtgagct gagatcatgc catcgcactc cagcctgggc aacagagtga ggctctgtct 180

taaaaaaaaa aaaaaaaaaa aaaaaaatca caatagcaaa gacttggaac caacccaaat 240
gccccatcaat gatagacngg ataaagaaaa tggggcacat atacnccata gaatactatg 300
cagccataaa aaaggatgag ttcatgncct ttgcagggac atggataaag ctggaaacca 360
tcattctcag caaactaaca caagaacaaa aaaccaaaca ccatatattc tcactcataa 420
gtggacagtt gaacaatgag aacccatgga cacangggag gggaanatta cacactgggg 480
ccctgatggg gnaatggaag gggtngggn aaggacancn tttgg 525

<210> 6218

<211> 582

<212> DNA

<213> Homo sapiens

<400> 6218

gaggaactat gtaatctttt tccactcttt tgaaggagaa aagttaagat tagagggtct 60
catggttttc ctcttttacc cagggaattg atatttttagc taaccaattc ccaccatatac 120
ccctggagct agggatgttc ttccaaagga aaatgaatca cagctgcaat ctcacaaaat 180
gccttgatcc cacacagctg cctctctctc cctcctgggg accaagaagg aaacaagggc 240
tatgttagtt gtcattcagg tcaggagagac agacgctccc ttgaccttc ttgactccct 300
ctcttcctcc tctccatctt taacccttgg attcaggaga cttgtttaac caggtcacat 360
tgagcattac tcttgcttca tctgaagatc acccactctc cactcctacc caatgtcaat 420
ttaggcaatc cagtgtcat actctgtgca cagcctcctt cccatatcat gttttggaaa 480
cacccttttg gngcattcga actctgaatg aggagcacct tacaccctg ntgntggaaa 540
ancngactta aatggataaa ggcactggan cttacattn tg 582

<210> 6219

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6219

```

gcccatctgc cccttctacc atgtgaggac agtgtttaaa gcaccatctt caaattagaa 60
actgggccct cagacaccaa acctgctagt gccttgatca taaacttttc agcatccaga 120
actgtgagaa ataaattcct ataatttata aattaccag tctcaggtat tttgttacag 180
caccacaaac agacttagac actgtatgat tccattactg gaactctaga aaagcaattc 240
taatctttct aaaaagatag gaaagagtca ttgtttggag ccagcaaagg ggaaaggatt 300
gattgggatg ggacacatag gaaattgccg gtgtgataga aatgttttgt ctctatctat 360
gaacaggcat tcacagctca gtgacttccc tttattctgt tgggaaagag ctgcttgaaa 420
ggaggaggga ttctctgctc ctagatgctt atgtcttatg taggcagggt gtaaaacatg 480
ggangcctgc tccagcccag catttctgt gacagatcag ccgaatatgc ctaatctggc 540
aattaccagg tcaagttgct ggtatcctta ctaattctct t 581

```

<210> 6220

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6220

```

agtagagaca gggnttcacc atgttgacca ggctggntc aaactcttga cctcaagnga 60
tctgcctatc tcagcctccc aaattgctgg gattacaggc atgagccacc gngtccagcc 120
ttatgcacct ttttgnaaat tcatttagca cttctttcct gactttaaat gtatngana 180
ctttaacttc tcatttgaat cagttgnaac atcttactgg ttccctcatt aatcaatcag 240
ttaaatggaa ttttgggcat acattcattc atatttgnat aagtcataat ttattttaa 300
tattcttttag ttctacacat aggcatgnga acacacactc acagatagac actacgccag 360
tcaaatttaa tattatatta tgcttggatt ttaagtactt ctcttcacat acttctcttt 420
atTTTTTaaa atttgntcaa gaaggcattg gattatttca anaattggaa ccaaagtttt 480
aaaaaacttt gaaaaaaatc aagtaanggc tttgnaaagc ttttacacgt atnttaacct 540
tnaaaccaac naggggattt aaaatccggg gag 573

```

<210> 6221

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6221

```
ccagattatc aatgtgagga agctttaaga aaataaaatc aacctactca tttattttaa 60
acagaaataa catcatgcat ttatttgaag gctctgtaag catacatgga gtgaatcatt 120
taccttcagg gctttttcat aaaacttaac attaaattaa ctaagtagat gtatctcagg 180
gagttacaat aaggacatg gttttaaaca acttaaaaat gttttaaaag aaaacaaaag 240
gtaaatacct tataataaca gacctaatTT ctaattttta gaattaaaaa aaatctgcaa 300
gcaaaaatta cggactgcag tataacaagg gtttaaaaat gttaatagct tagatttaac 360
atgctactaa tgctcactct acatctactg aggtagatgg tcatcttagg atgcccacat 420
aggtagttaa acaaagcaca aaccttctgc atatgggtac gactatcaaa gctctgcaac 480
gaatacagng tttgtcaatg ctggcccaac tggtagtctt ggatatggac ttaacaagca 540
gaccnaaatg aactgcaang cnatcactaa aaatta 576
```

<210> 6222

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6222

```
cCGTcatctt tgccttttaa tataagattt ggtttcatca tttctgagtG taacatattt 60
cttctaataaa tagagctctc tgcttgctcG aaacttcgCG ttactggga ggtgaagggg 120
aataaggctg accgtaattc tggggtgacg ttgccagttt catagtcata gataaacttc 180
tcaagggctc ctggatgctc acagcaagga tgagttcatt tcaaattccat ggtactgaag 240
aagcatgaca aagcgtttca aggccccatc tgtgcctggT gtggactcaa accgttcaac 300
cagaggctta ttgtccttga cttgggagga ggaggtctct gtttgatgag cgtcgtttgc 360
```


atcaaggatg gctgcggcct gcagggagca cttctctgac cgcacttgag tgatgagctc 420
 ttgcacatca ggcaggctcct ttaggctggt cttgaaggcg ccagcatcag aatttacttc 480
 attgcatatt tcagggactc tggcatacag gacaaggctt cgttccactt ntttancnag 540
 cncataggac tgaccatgaa aaaccnctgg taacctttaa t 581

<210> 6223

<211> 504

<212> DNA

<213> Homo sapiens

<400> 6223

gctgttacac agaagagact agttaagtgt accattgaag actattacgc atcacgtgcc 60
 tacgttcac aggccttaag ccctcaaaga acaacagcat caggggctct gtgagagccg 120
 ccacctgagc ctcaccgctt agttcataaa acagccctgt gtcctttcta caaagccagg 180
 tcgtgttttc taccacagt tcaggactcc agcgtagaca gcaaacacaa aatttgtttc 240
 ctttttgaaa caaacagtc ttagtagaag caaaacaaac aaccacaatc taaaccagcc 300
 gcgaggaacc ctttntagc tggaaaggag aatgtgtcgc cagcgattcg gagtgaaaag 360
 gatgggaaga tgcctgtgcc acacccttga atgtggtcca cagattcacc agctccaagg 420
 cagcatctct ttccaaagca cctgcagcag gangctgtgt gggggcaaca aanntcactc 480
 ntgataccan agaatncccc cggn 504

<210> 6224

<211> 579

<212> DNA

<213> Homo sapiens

<400> 6224

agtagagaca gggtttcacc gtgttagcca ggatggtctc gatctcctga cctcatgac 60
 cgccccctc agcctcccaa agtgctggga ttacaggcgt gagccaccgt gcccaccag 120

gatctacatt ttaacaagat ctcgatgatt tgtgcatgca ttaaagggtg agaaagcact 180
 agtctacatg cccatctatc tggacacccc acagccactc cagcccagca tggccatgct 240
 gaatgcagac ccctccccta gaccacaaat ttctgtttgg ttttccttcc tgatgaacag 300
 tttctatcct atgtatggag atgggagtg ggtctggagt ggggtcaatg tccccgcat 360
 gtggctgcct cactttttta tgggctccaa atgacacaga gctgggtcac ctgggtctca 420
 ctgcagtttc ctggatcagg gatactggaa agatgtcatg ttccacatgg acaccagcct 480
 aactttaagg ctgacncaaa aagactcctt ccagcatgca agtgggatgg tctttttgta 540
 ccacgtgtn cctttcnctt aatggngcca gggccctna 579

<210> 6225

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6225

aggtttcaag cagtctttac ttgggtttta aaacagtgtc tcatgcattt acaataagtt 60
 attacagaac tctaagtcac tgatgcacac acaaaagcta aacccaactt actaactatg 120
 cagacctctc ctgatctccc caggctgggc agtaattagt accttacagg tgtgatccat 180
 ggcccagaga aggcagccac tgtcagttac agttggactg ctgcatcaca gtggaggcag 240
 cagagttgaa gatccacaga gggctgtaat acagcccaga aaagacaacg gagagtgaag 300
 gctagaaaca ttgaggaagg ggtcaagaag cacttgtact tctgttata ttttccaata 360
 gaatattcct gcaagttacc catcagaaaa aggtgttcag agggtttgaa aaagaagtgg 420
 ttagcccatg ccagtgaagg tgacaaaaaa caaaacaact tgatttttgg tcatatcaga 480
 aaaggatgga ggggaacacc caagtncttg cacgggcccc aagtgcttcc anccaaagga 540
 ntgctgtttc accagcccaa anttntaac agcaccacca aaa 583

<210> 6226

<211> 571

<212> DNA

<213> Homo sapiens

<400> 6226

```

gtagagatgg agtctcccta tgttgcccaa gctgctgtca aactcctggg ctcaagggat   60
cctcccacct tggcctagat ttgtatTTTT aattgacaaa taataattgc atgtagttat  120
gggttataat gtgatgtttt gatatagcta catatactat aaaatgatta tattaagctg  180
attaatatgt ccatcacctc acatacttat tttttataat gaagacattt aaaaacgtat  240
tcttttagca atcttgacat ttataatacc ttattatgag ggctaaaaat gaataatatt  300
aataatcctg tacaatgggt ctcagaaact tagccctctt gtctaactga aacgtctgta  360
ccgtttgatc aaccaaagat ggcttttgtt ggcaattcaa tttttttgac aaattcctca  420
ttttgtcttc atttggagtt ttatccatta caagagagga agatgacnca agccagaata  480
gaggaagatg aacaaccctc aggatctgaa ggacactggt gggttttttt aattaatttg  540
aggtatattg ctaaaacggg ctacttgtgc c                                     571

```

<210> 6227

<211> 579

<212> DNA

<213> Homo sapiens

<400> 6227

```

cagtttaatg aacatttatt atatattcca actgagtgaaggcactatg ctaggcagtg   60
agagaaatac aaatgaaaat aagactcaac ctcttttctt acattttttt tttttttttt  120
ttttganaca gtctgtctct ctatcaccca ggctggagtg cagtggcatg atcttcgctc  180
actccaacct ccacctcctg gggttaagcga ttctcctgcc tcagcctccc aagtagctgg  240
gattacagat atgcaccacc gcactctggct catttttata tttttaatag agacagggtt  300
tctccatgct ggccaggctt gtctggattc ctgacctcag gtgatccacc caccttggcc  360
tcccaaagtg ctgggattac aggtgtgagc caccatgcct ggccttttct tacatttctt  420
atcacggcat ggatacaggc agagtaacac aaactatcct gtaggcagtt ttaaataaag  480
tccatatttg agcncattna aangtattga acagatggga gattattcag aatgagattt  540

```

tgcttnaaag cctttcncct aatttcggnc tggactgnc

579

<210> 6228

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6228

```

cttttttttt ttttttcaaa tactgagatg tttattgcat tttaaaaata tccacactct 60
taaataatcct gtttcaaatt cctcctaaaa tcctttacag cacacaacat caactactgc 120
agtagcggttc tcacaatatt acacttgaaa ataccattta ggaacaatat tttaggaaat 180
agagggttta aggcaagaca ttcatttgga aaagttaatt tctctctatc atccagattg 240
acacgattat tttccacct cttcagtgcc ttgggatacg caacatacat tcagcaacag 300
ggcacgcgtg tgaccctacg gacaagtgct gaggttgga gtgccactg aaatatggaa 360
atattcttac ataaggcgtg gccacgggga catggcatgg gagggcttgt ttcactccat 420
ttcaatctgg tgtcaggaaa ttccttatct ataactgcca tccccccagt aactgctttt 480
caacaaactc aaacccttga aaaggtctaa gatggttctg ttaacatcaa aaaaaaacag 540
ccttanagct ttccgacact gtttagtgat gaagnctcan gntnttt 587

```

<210> 6229

<211> 559

<212> DNA

<213> Homo sapiens

<400> 6229

```

gaggtggagg tctcactatg ttgccctggc tggctctgaa ctcttgagct caagcgatct 60
gcccgtcttg gcatcccaa gtgctaggtt acaggcaaga gccactgcac ccagtcataa 120
tctctcttga ataaaccctc ttacttcccc ttttgcatct ctctctctaa atcctacatt 180
tgtctccaca gataacatct caccaattta gagacacttt tctttctgct agatcaagat 240

```

gtttaaagca ttgtttctca cttctttcat gaaaccttct gagatcagtc agctaagatc 300
tagttaattg aatcatcaac tactctaata cttctgcctg tcctgttttg ggttgaaagg 360
gacacaattc aagggtcaaag accatgtcag ttgcttcctt tgcattctca acactcagac 420
agcaccctct gtagacctga gtattgacaa aatgctcttc anaagagctt ntccagtcac 480
tctggaaaag gccttcagag gcctccgaaa tagnctata attaataaat atttggccnt 540
gggggggttta acaagtggg 559

<210> 6230

<211> 577

<212> DNA

<213> Homo sapiens

<400> 6230

gagatggagc ctcactctat caccaggtt ggagtgcagt ggcgcgaaac tgggctcact 60
gcaacctcca cctcctgggc ttaagcgatt ctcctgcctc agcctcctga gtagctgggg 120
ttacaggtgc ctgccaccac tccaagataa tttttgtgtt tttaatagag acagggtttc 180
accaagttag ccagactggt cttgaaccca tgacctcaag tgatctgccc acttcagcct 240
cccaaagtgc tgggcttaca ggcgtgagcc actgtgcctg gccagaaagc cctctttgat 300
gaggactgag ttacactgag ttttaaagga tgagtagaaa gtggccaggc aaagagaggg 360
agggaaagct tccaggagga aggagtagct tgtgtgaagg ttctgaggtc agaaaagtag 420
ttttgcaaaa taaaggaact gaaaaagaga tcaggtagag agacagaaag gcnctanaga 480
gaagcacata aggtggcana naangagaag cagttcttcc taagatatct atcaagngcc 540
tatttttaac agggctagca ttnttgatga gactgtt 577

<210> 6231

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6231

```

atTTTTtgag atggagtcta gctctgtcgc ccaggctgga gtgctgtggc gcgatcttgg 60
ctcactgcc a gctccgcctc ccaggttcac tccattctcc tgcctcagtc tcctgagtag 120
ctgggactac aggtgcccgc caccatgccc ggctatTTTT tgtatTTTT tagtagagac 180
ggggtttcac cgtgttagcc aggatggctt ccatctcctg acctcatgat ccacccgcct 240
tgccctccca aagtgtgtggg attacaggcg tgagccacca cgcccggcaa cacatgttat 300
ctgtgatgga agaaaggttt tactttaaga aaatctgcag ctagtaacac aacaggtggg 360
ccagaccagc agctctggct cagattctgc tctacaatga taagctgttt aaccttcgac 420
aagttactaa actgcctgag tccaagtgtt ctcatctata aaaagggtga gcaataatat 480
ctatTTtgta aagttgtgag tgctatataa aatatctaca gggactctct agtgataagt 540
ggagcancta ctatggtgta aaacatacaa attgct 576

```

<210> 6232

<211> 564

<212> DNA

<213> Homo sapiens

<400> 6232

```

aacaaaaatg atcacacatg ataatggcag tggcaattgt ttatataatg gccactacac 60
accagacagt attctaagca ctgatataatt acaaactcat ttaaacctnt caaccttatg 120
aagtaggtat tattatcaat ctcatTTTaca gctganaaac tgaagcaa at cacttcaact 180
aaggcaatgn ggtctcagga tgtgtgctct ctgttactca naaaca aaag gtacactTTT 240
ctgaggccct ntagtgcagg cacaaagaca ccatagctct tactggatct ccagcctatc 300
actctaacac tagccaagat aataactaat gttaaaaatt atgacttgga gtcaacaagg 360
ctaagatata tTTtatatac tTTtataaaag caaagaaagg tatacatTTT atagtgaatt 420
ctattcgaca ctgattatag gaaaaaagaa attagtactt taaggaaagc aaactntggn 480
tntncccaaa ttacgtTTTa aaaaagctaa aatncccata ngggtctgcg tggctaaggT 540
tattatttcn tcaaaaatca aatg 564

```

<210> 6233

<211> 597

<212> DNA

<213> Homo sapiens

<400> 6233

```

atcatacaac aaattaacac aaattttattg ggtggaaaat gtgaaaaggg acaaaaaaag   60
gggtagtttt gtactgatat aagagttcat aaagtgataa actcaggtcc aaaatcttca  120
gccacatca aagacttcat gttcttatga ctctagaaac aggccagccc cggtgctgg   180
gctcttgaa tcatggagtg tagctacaca taaagaagct cccttgtaa ggacatgaca  240
tcatgtttta catcttggtc cttttcctgc cacctgtctt cccagaagg cctctgcaac  300
cggttttttg tcagctcaag ttgtagacca tcaaacctgt gcttaaacca gcgatgagct  360
tcttcagat tagctgttat ctgttctgat tccacactgg cttctttcag cgtattctct  420
gntgcctctt tacatttctt caggtgtctg acagtttctt ccaattcctg gcaccgattc  480
tctacttctg ncttattttc cgtctgcttc taaggtgcca gctcttgctg gttattccga  540
ctgaggcatc atattggctc ttagccacat ttgnatcttt tctggaggta agcattn   597

```

<210> 6234

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6234

```

acagagtctc gcaactgtcg ccaggctgga gtgcagtggg gtgatctcgg ctcaactgcaa   60
cctttacctc ctgtgttcat gccattctcc tgcctcagcc tcccagtag ctgggactgc  120
aggcatgcac caccacgctt ggctgatttt tgtactttta gtagagacag ggtttcacca  180
tgttggccag gctggctctg agctcctgac ctcaagtgat ccacctgctt tggcctccca  240
aatgctggg attacaggca tgagccacca tacctggcct cttttttttt ttttttttg  300
agatagaatt tcaactctgc acccaggctg gagtgtagt gcatgatctc agctcactgc  360

```

aacctccacc tgccagggtc aagagattct ccttcctcag cttctcaagt agctgggact 420
 acagtgtgc aagtaccatg cctgggtaat ttttgnattc ttgagtagag ataggatttt 480
 gccatgttgc ccacctggct tgaactctga cttangcaac canccacnta gcttccaaag 540
 gctggataca gctgaccatg gatctttaac atgccaaagn tnt 583

<210> 6235

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6235

aacgttaa at cgattttatt taaagccata aataaataag ccaattaacg ctcaagtctg 60
 agagggctgc agtcttttta acaataccat agtccaaaaa gactaatact tattgctgat 120
 tcagctcaca atattacccc tttccagaca acagcacatt caaatgttca agaaaacatt 180
 ttatgggcac cttttatggg catttgagat tcacagagca atgggccatg gccctgccct 240
 caaggaactt acaatgtagc tggagagaca caaaacatcc aaaacagaca tgaggggctg 300
 gctctacctc cacacctcta tctgaacaaa aacgattact ggcttaagtc ctcgtgttgt 360
 aacgcatgag ccacaggaat atcttagcaa gtacgcactt tatcaagttt caatttgc at 420
 gtcaaaacaa aagtttttat gttggtcatt tatatttgn ttcactcaga tttccctcaa 480
 tcaaattaaa agagaaggcc taattncaag ccactgnacc ataatgggtg ctggcctcga 540
 tgaaaggata cttgggtcatg nccaaaaatt ttcccaggtc cncattt 587

<210> 6236

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6236

cttaaatatg tcttttttta aatgtttgca agaaactcta agggctaagg aaatgcactg 60

cattatgac tgggctcctt agagtacaaa cctcaccagg cttagcatc atccataaga 120
aatggtggat tacttaatga cttataagta aaacagtcac taaatgatcc tttcatactt 180
taatcctctt atgcagagac tgagatactt ccatacatc caatatctgc aactttggtt 240
ctattaaagt atttgataaa agcaaaaaca tttgtgacc acagaactct atggaacttt 300
ttttcctttt aaagtgtcag gtgaacctag cgtgataagg caatgttgcc tacatatccg 360
cgaccagca caggaggagc agcacagaca gggcatgttc cagctacca ttgntgnata 420
atactgctcc caccaggggt aacactgntt atgttccttg gaccctacat ctattcgtac 480
ctgaaacata atttgnataa aatatgatgg ttctttagaa atatnttagt tttttaataa 540
actggcnnat gaaaaaangg nttcnaattg ggaa 574

<210> 6237

<211> 165

<212> DNA

<213> Homo sapiens

<400> 6237

gagatggagt ttagctcttg ttcccaggct ggagtgcaat ggcgcaatct cggctcaccg 60
caagtctctg cctcagcctc ccgcgtagct gggatcacag gcatgtgcca ccacgcccg 120
ccaattttgt atttttagca gagacngngt tnnncangc tganc 165

<210> 6238

<211> 597

<212> DNA

<213> Homo sapiens

<400> 6238

aaaactttca gtgttttatt ttgactgca gctgtttaca gaaatatagt tgcgagtata 60
caaatgttcc aatagaagca aaatatcttt ttaatattta acaagttatc acagatagct 120
aaaaacatag atgcaaatga aattccccca gagaacaaac tgaaaatatc tggatatcagt 180

gctctgaaat cccaactatg aaagccatat acacaaaaat gtaaccctta tatcattgca 240
 ggacaatgga agaaggcagt tcagtggttg atcagtgtgc tcaagcaa at aaaattaaat 300
 aaaaattaaa aatggcagaa tggtagctaa accacttgag aacagggtta tgaaattatt 360
 ggtactatac ttaaaacatt aagtaaaaga agtgaatgaa actcatttaa aggttgncaa 420
 aaaattagca actacttgga gcttatcaat taaaanggaa ccangntagc ngaccccntc 480
 ntagatccaa agaaatttga tccaggtcac tggaatcagc tagnaactctc aaggcccatg 540
 acttaatgcc ggagttttta cgggccccna agttgattcc aggccacttt tnaaagg 597

<210> 6239

<211> 599

<212> DNA

<213> Homo sapiens

<400> 6239

acaacaggta aaaaaacata caacagaaac gcttttataa gatacaatta gtaatacaaa 60
 tataaaatct tctaaacaat cactgggtatt gttctactac taactataac acagtggcat 120
 taacaatttg tcccactttt tataactcatt ctgcttatta gtttaaaact gactgggtcac 180
 agactgattt tgggaaccag ctggcaaaaat cacaacttca ttttggtaat gaataactat 240
 agattttcaa gagcttagaa agattttttg gaatataatt tcctaagtat gaaatatgaa 300
 agttaatatg ataaatgaat gacaaattag tatactattt aaattttagt taaatattct 360
 ggaaaaactg tttcacttgc ttgggtgatcc acagagcacc cacaaagtta gcttttaaat 420
 ttggaagttt aaaatcatga aggaaatatt ttaaatagaa aagctcacat cttncatata 480
 aatgggttaa aaaatntaaa cttattggac ctaatctatc agaattgggt tgggttggtta 540
 ccaggggtta aggctggaag aatggttntc tttacaaaaa aantaggaaa aaatctggt 599

<210> 6240

<211> 609

<212> DNA

<213> Homo sapiens

<400> 6240

aagagatggg gtcttgctat gttgcccgga ctgggactta aactcctggg ctcaagcaat 60
 cctcctgtct cagcctccca aacagttagg actacagggtg cacgccacca cactcagcta 120
 atctttttat ttttatTTta tttttttgtg gaggcagaat cttgctatgt tgctcaggct 180
 ggtcttgaac tcctgggctc aggcaatcct cctatctcgg cctcccaaag tgttgagatc 240
 tcaggcaagc ggcaccatgt ctggctgata tgtcttcaat cataccttaa caccttttcc 300
 tctgccaggc gacagtcttt tgagaaaagc aactatacta ccaattctgg accccttgaa 360
 agatccagca gcacacacct tgggtgctca agaaatatgc gtttaatttga atttcaaacc 420
 ctatcacaat agctgctaca gtttactgac gggctactct ggctggggcc ctggacanga 480
 atgggcctct tactccatta atccttiaacc cttaccttat gangnangna gtataatgcc 540
 attttacaga agganggaac tgcttaaaaa ctggtanggg cattgcccga ggtacactgg 600
 ttgtnaaag 609

<210> 6241

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6241

agaaaaattc cactttaatt aaactgttca atctggattt ttttccccg atactaactg 60
 aaattaaaaa tagaaatcaa tttctgcgac ctttcaaggc agtctttgaa atgtcaaggt 120
 tttaaaaatt attttacagc aggaatttac atataaatac actctgtaca atgcgttaac 180
 tgaacaatca ctgggcttcc atcatggagg agaaatgatt ctaggacgag ccagggcagc 240
 attcaattac tgccttctta gtggaagact tttcagccgt ctcagcagct cctggggcga 300
 cacgtctgcg gtttcctcgt cactctggct gtcgtgctg tcggaactct cggagctact 360
 acttttctct ggttttttat tcttttgctt gcctttgggt ttgtgcttcc tngttcttt 420
 tcttctcttc ttccgctggc tcttcttggc ctgggcttgc ttggtctttt atgttctctt 480
 ttgaggacct caagggttg acgagcattg ggcanaaac gaggaaccnc ggccgacttt 540

ctnttnacna tengatcttt ngatcggaag gag

573

<210> 6242

<211> 442

<212> DNA

<213> Homo sapiens

<400> 6242

ggccagtgtc tgacctttat taagaggtga ggtggggaga gggcccgcca ggggtgcccac 60
tccctcttgg tgaccccccc atctggagtt aaggctccaa gcagcaagtg acagaggagg 120
gtgcctggct ccagcagcct gggcatggcg gcgactcccc caaaaacacc ccagctgggt 180
gggtgcctgg gggcctaggt gaggctgggtg ttggagctgc tggtagcact gcctcgcttt 240
tgcaggcagc gcacagcact ggggacctgc aggcctgtcg tcacctggaa gctgccacac 300
cataccgtga aagcaggcag cagcggctgt gtgaacctgg tcttgaaagt gtgcagcact 360
tgtttgggtgc gggcattgta gaaggacagg aggccttggn ggangtacag ngcacacca 420
ggcagtcngg cancgnggnc gt 442

<210> 6243

<211> 589

<212> DNA

<213> Homo sapiens

<400> 6243

ggctttttat ccaggttata ttttaatatc tggagtttta atccagcata caaaaatcac 60
cagtatacat ctattaagtt aactgcagta ttatttcacc atcaccattt acatgtactt 120
ttcaggtatc agagacttag tgctttaagt agcaaattac ctaaattatg aacacatatt 180
tccaaaaaca aaatcaagct cataattacc aagtatatat gtacagtgca gattaaaaaa 240
aaactgaatt agcacatatt tctcttttct aaagctccta tgaagaactt acactcttct 300
gcactacca tctattctgt acatttataa taacatttgt tttgatttaa agtcaaaaat 360

ataaaggctt aaatttttgt gagactaacc cataaaaaag gactccaatt ttaaaccaat 420
 ccctgaaacc aaagcattca aatatttgaa tattagtcca atatttctac atagcacgat 480
 aaggattttc aggtacttca agttttggct ttatttttaa taatgggaat gggctacaat 540
 taccattaac aattattcaa gtattttang ggccttacat atcattacc 589

<210> 6244

<211> 596

<212> DNA

<213> Homo sapiens

<400> 6244

gatttagtta catcattctt ttcttctcta ctttctcttc ctgaaaaact cttccttaca 60
 taaacaaatt catactggag atatatgtca gaaaacattc agcctgagta aactgaacgc 120
 tctgtacaga aaacaacaga acaaaacaga acttcaacag taacactggc gtggcataat 180
 ataagccacg caaaatgctt ccaaatecat tatctcttct gagtttcatc ttgtgaggtt 240
 tgaagggtac actgattgta cttaaaaacc taaggcacag agaagggttaa ataacatgcc 300
 tgagttacta aaaagagaat ccagatctag ttcaaaatct ggtcttcttt tcactatacc 360
 aataacatct gactggaggc aagatgagag agcaatgagt aagcactaat gttatttcag 420
 ggccttaaaa cccttatata ttatgaacta ctcttcatta gaaaaaagta tgcattttct 480
 taaagcataa atcacaatat atatttttaa agggttccca agtcttttct acttcataca 540
 aatgaagttg gctgnatttt aaaggcttnc cctttgggaa aaccggaccc aaaaaa 596

<210> 6245

<211> 511

<212> DNA

<213> Homo sapiens

<400> 6245

ganacggagt ttcgctntgt cgcccaggcc ggactgngga ctgcagnggc gcaatctcgg 60

ntnactgcaa gctccgnttc ccgggttcac gccattctcc tgcctnagcc tcccagagtag 120
 ccgggactan aggcgcccgc cactgcgccc ggctaatttt ttgtattttt agtanaggcg 180
 gggtttcacc ttgttagcca ggacgggtctc aatctcctga cctcctgatc caccgcctn 240
 ggccctcccaa agngctggga ttacaggcgt gagccaccgc gcccggccgg cttctagttt 300
 ttatcatttc tgtttaaaag ctaacagtct cattgttgca actgtgaagg caactgggtga 360
 attaacgatg ggacacatat tctttgcact accatcaggt anaggatatt ttcctgctg 420
 naattttgag caggccccgg gacttggttt tnaangnaac attggataaa tangctggtt 480
 caagttttat gcncaggctt taanaggcct a 511

<210> 6246

<211> 566

<212> DNA

<213> Homo sapiens

<400> 6246

agagagacag ggtctcactt tgttgcccag gctattttct ggatgtctat taaaaaaaaa 60
 ttagtcctgc acagngttct anaaagggtt tttcttttca naatatccat attctccaag 120
 tagcaagtta gaatataagg aatatttgcc attaaacctt tctgttanaa atgtaaacat 180
 gaaattgcct aatatagacc tatctcanat gctaaataga attgnttata acacctttgg 240
 aatataatta tngngagctac acttaaccat ctggcatttt gcttcctgcg gacaatttgc 300
 aatagcatag aaaaatattt tgnttgngta tttcttatca aacagatatg ctaaagttct 360
 gtttagagag taatagcatt ttattctaac ttttaaata aggnagccat ttgcagcagc 420
 ttgatataata agtaaacaaa aatttttaat attaataaaa cactagcaca tncnctgaag 480
 catctaagaa attcaaaatt tnaaacnctt nccagtaatg ncctttgagn gggaccattt 540
 ggaataaagg cccttgaaaa attgga 566

<210> 6247

<211> 527

<212> DNA

<213> Homo sapiens

<400> 6247

```

ccaatgaaag tctattnatt tgctcgnaat gagacanaac gctacaatct gttnaacact   60
gggctggaca ctgcagnat taggggcagg tgtggggcag ggnggggcct ttgancccga  120
ggacaaatgt ccatggcana nccttccaaa aaactcgtcc nttaccctgn ggggcaaaaa  180
tagaaatcac atgatcgcca ctgattcnca gnggaaagg cncctgagctg ggcccggcag  240
gcaggcagcc tcagcanana ttcaggcagt cagcatggng cggccctccc gccagcactg  300
tcaggtcanc anaggttcaa gcagtcagca tggcgcggcc ctctgccag caccgtcaag  360
gaggggggatg ctgctcctgc ctggggcctg cctttatnt gagggcccct ggccccaant  420
gggtttaana agggacctng ggcttgccca agaacctga aanccctggg ttggccantt  480
ttggaggcga aaggccacag gtcntgaac ccnttgcca aggtttt                    527

```

<210> 6248

<211> 548

<212> DNA

<213> Homo sapiens

<400> 6248

```

ggctaataac ttattacttg ctgtttatat ttattttgga ctatggaaat gatgctagac   60
aaaaagcaaa gttgagtgat tttcttattt aagttcaaag tgggtcgtaa aacagcagag  120
acaacttgca atatcaacaa tgcatttggc ccaggaactg ctaatgaacg tacagtgcag  180
tggtggttca agaagttttg caaaagatac cagagccttg aggatgagga gtgtagtggc  240
aggccactgg aagttgacaa caaccaattg agagcaatca ttgaagcaga ttgatcctct  300
tacaattaca tgagaagttg ctgaagaact caacgtaaga actcaacgtc aaccattcca  360
cagttgttca gtatttgaag caaattgaaa aggtgaaaaa gctcgataag tgggtgcctt  420
accagctgag ccaaaattta aaaaaacccc ggttttgnaa tgggtggcntc tcttaatctt  480
cacaaccacc gaaccnttnt taatcggact gtgaagggca ncaaggacta gattttatnt  540
gacangca                                         548

```

<210> 6249

<211> 545

<212> DNA

<213> Homo sapiens

<400> 6249

```

atttctggaa tggctaattt ttatttaatt ctgtaagcct aaggtaaaaa gcataggcag   60
taactttttac tagtcaataa aaagcagttc taccaatcca ctggtaatta atacactaaa  120
cagagttgga aagcatttta ctgaaagcaa aatatttaga gaaaatagac atttatacaa  180
aattataaaa tgcttgtaat aagaataagt gcatttcaag gaaagcacao acttaattta  240
tagagccagt taaagcttta aaaaatttaa gtggaaattg aaatatgcaa aaatgtataa  300
acattctaca aaagatggtc attcttttcc tgagtatact aaagctatga aacgtaagggt  360
gacaaaagga aggtagaagc ttgggaactc tttctcaagg gcattttctt tctacacact  420
gnttccttc ttctcatat tcttgcttgg naatcncatt tgggtggaaag gtncccaaga  480
ggctanaatg ganccgcaa tccttgagct aacctcgcgc cctgtggatt attgcaatca  540
atttn                                           545

```

<210> 6250

<211> 542

<212> DNA

<213> Homo sapiens

<400> 6250

```

gccatgacat ntagaagcat ttattttatg caaaaaactt aaatatgatt atngntacnc   60
ataaagngca cacattacct atgctgaaca atgccaagaa acataatata ttgatgcaac  120
agttttctaa aataaacata aaaatgagcc cagaccatca gacaaaagca aaacacttat  180
ttccaaatag cacaatgctg aaaattgata gcaatcctaa aacacctcca actttcctta  240
aaagctgcca aagtccaact attttttaaa aattgatttt ttttacatta ataaaaatct  300

```


ggngacaaac attataaaac caaatgctgg acagtcttta ctcctttaaa attccaaata 360
 ttccaacata atcacaggag taaaaacat tttaaagnga tatgctttat gaaacaaacn 420
 acaatatgga cntttattgn aaattatntt aaactaaaat ggggggggaat ccaaanttgg 480
 accnggttac ctactggcaa atcatnaatt taaattttct cacttggata aaaatcanaa 540
 gg 542

<210> 6251

<211> 493

<212> DNA

<213> Homo sapiens

<400> 6251

gttacacgtc tctgatttta atgagtcaat ctcaaggcaa agctataacc ttttccatgt 60
 gaaccttaaa acggaaatcc tacgtgtttg gctcagctac catagacatg tcttgcccca 120
 nagttccagt gtatttttca ctttagttt cttggctcct ctccgcctct acaccagcct 180
 catatccaca cgggatgctc tctgctgagt attgtcttga gttagttctc cctctcatgt 240
 tctggctgat gctactcatg gtcatagtat cacctgacgg ggaaggagta tgctatgaag 300
 gtgaaaaatg ctaccatagc attttgtttg ttataaaaat gtcaggccct ggttccattt 360
 ttccccctc ttatatctaa attttgaaac cactggcctn taacaagtct gtantaggct 420
 taagttcaan gggccatttg gttctttngg gnctggttgg gaanccaatt ganggaaaag 480
 tttgctaaaa aaa 493

<210> 6252

<211> 535

<212> DNA

<213> Homo sapiens

<400> 6252

gagacggagt ctactctgt tgccaggctg gactgcagtg gcgcgatctc ggctcactgc 60

aacctctgcc tcccgggttc aagcaattct cctgcctcac cctccccgagt agctgggact 120
 acaggagtgc gccaccatgc ccagctaatt tttgtatattt ttttttttag tagagacagg 180
 gtttcaccat gctggccagg atggtcttga tatcttgacc ttgtgatctg cccgccttgg 240
 cctcccaaag tgctgggatt acaggcgtga gccaccgcga caggcccccc tcactcttat 300
 ccttaactaa tgaggggtgt atttgtttgn tttgnttttt tagatggagt ctcactctgt 360
 cgcccaggct ggagtgcagt ggcgcaatct cggctcactg naaccttcac cttctgggtt 420
 caagcgattc ttctggctta nccttctgag taactnggaa tgcagccttc gccacangcc 480
 ccgntgattt tggatggtta agnaaaaang gggtttacca tgttggcagg ctgn 535

<210> 6253

<211> 503

<212> DNA

<213> Homo sapiens

<400> 6253

cagtagcttt aggggtatga gtgatttttt ggttacatgg atgaacggta ccatggagaa 60
 gtctagaatt ttagtgcacc caccacctgg acactatata caataggtag ttttcatct 120
 ctcacctctc tcctgcttgc cagccttctg agtctccaat gtacattata ccactctgta 180
 tgcccttgca tatccataag cttagaaacc acctgtaa at gagaacatgt tggatttaga 240
 ttttgattcc agaattactt cacttaggat aatagcctcc agttccatcc cagttgctgc 300
 aaaagacatt atttcattct tttttatggc tgagtagtat tctacaatat acatatgcca 360
 cattttcttt atctactctt tggttgatgg gtatttaggt tgattccgta tcattacaat 420
 tgngaactgn gctgngaaaa atatggcttt tttaaaaaat gggnttcctt ttcattnggg 480
 aanaacctca ntaggggaat tca 503

<210> 6254

<211> 547

<212> DNA

<213> Homo sapiens

<400> 6254

```
gtgattcaca gtgcactgat tttatttaca gatcaaaagc cacttaaata atctgcagac 60
acaagtgctg tccagggcag aagcctgggg tccaaatcag cttatccct cctcatgccc 120
acagtcagcc caatgctgtc tccgttccat gggccagcac aggcaggcgc cactctgctg 180
acatgaggac ctggggtagc tcagacattt gactacccaa gccagaaaag gagctgggtc 240
cagcccttac ggggaattcc ttttaattccc ccaggccagg tgagtgtga ctgagtgtg 300
acaacagctg tagaagtagg ggtttggctt ctggcccaga tccacgccct tgcctctgt 360
catcacctgg aaggcagcca cactgacgta atcctctgcc actttctgga agagctcgtc 420
cacactntgg cctgncttgc tggatggttc aaagagctga actttgatat ctgnaagaa 480
gaatggctta aggcctatac cctggnatt ggtaaccgg ncaaaaggga nggctancag 540
ttaagga 547
```

<210> 6255

<211> 541

<212> DNA

<213> Homo sapiens

<400> 6255

```
gttttttgag acagaatctt gttctgttgc ccaggctgga gtgcagtagt gtgatcttgg 60
ctcactgcaa cctccacttc ccgggtttca agcaattctc ctgcctcagc ctctgagta 120
gctgggatta caggtaccca ccaccatgcc tggctaattt ttgtattgtt ttagagagg 180
ggggtttcac catgttggcc aggctgtct tgaactcctg atctcaagt atctgccctc 240
ctcggcctcc caaagtgtg ggattacagg tgtgagccac cacacccgc cctgtctggc 300
ctttttatgt ggtttaagtt cttcaccat ctgactggcc acacacatgg gcagagcttg 360
gaaggagag gcagaggcag agactcagct catggaaagg gctgggctgc ctgggtctga 420
agcccagctn tactaccagc tntgnctta tnggcaggtc acaaacctt tttaacttg 480
ggttttttgg cnttgacatt agccaagcca ntgggctgg ttggaagcat gaggtgacc 540
n 541
```

<210> 6256

<211> 470

<212> DNA

<213> Homo sapiens

<400> 6256

```

ggagacagag tctagctctg tcacccaggc tggaatgcaa tcagtgcacat gatcttggtt 60
cactgcaatc gcgccactgc actgcagcct agggggacaga gagcaagact ccatctcaaa 120
aaacaaaaac aaaaacaaaa acaaaccaga attggctttg ttatcttctt aaccctagac 180
agaataggtg gtcaaaggaa aagggaggag agataccaga taggtttgca aatatggtaa 240
agttcattat tacccaactg ctcccttgaa atctaaaagc gttctttttt ctccaggctg 300
acactggcca catccacatg aagaatgtaa gcacatcaat cagtacagat gccagctgag 360
ccctgtttct ccttttttaa ccaaatataa aatttgaagt cctnccacaa ccatntgaat 420
gggcctnccc tttngncaag gnacttttaa aattaaacnt gaaagggttg 470

```

<210> 6257

<211> 429

<212> DNA

<213> Homo sapiens

<400> 6257

```

gtaagaaata aatttatttt ttaaataaat caccctattt caggtattct gttgtaagta 60
acagcaaaca gactaagaca agtaggtaaa tcattatgaa gagaactatc tagtagtatt 120
tttcaaaaaca ttgtcctgaa catataccaa ggtagatcgc attctgggcc ataaaacata 180
ccttaataag tttaaaataa tagaaatcat acaatgtatg ccctcaggcc gcagtggaat 240
taaactagaa accgatgaca gaaaaagagc tgaaaaatcc caaaatattt ggatagtcaa 300
caatacattt ctaaataata cataggtcaa agaacaaata tcgagagaaa taaaaaagaa 360
tattttaagc taaataaaaac tgaaaatact acctatcaaa atctgggana tgccncnaaa 420

```

ggtagnnnn

429

<210> 6258

<211> 537

<212> DNA

<213> Homo sapiens

<400> 6258

```

aaattttttc atctcaaaga gttctcagtc cccacccac acgaggtacc gtgaaggggc 60
actaaagtac attttgatgt agggggtaga gcttaaaggt gctgtccaag ctaagaatca 120
agatgatgct gtttaaaaaa gaaaggcaat tccttctacc tccatctctg gagtcagctg 180
agggagggca gtgaactaga ctctcccag aggattgtcc taactcttaa cttagagaa 240
aactgtgtaa ggacctgcac atatagaatc atttatttgt ccaaaatagc aaaaataggc 300
ctatttcacc cttaagaatt tgcaaactctg atcagtcagc atcataaaaa tgtgaatgga 360
ttccagatgc aatccatgtg ggcatgctct gtggaactag ctatgcatct tcagcttgaa 420
tgaacatgaa gctggtcatt ttcattaaaa cctgnntttn aaacttncct taattaaatt 480
ccccntggan canttaaate ttttcttaca ataattcctt tacattaaaa ggtatct 537

```

<210> 6259

<211> 532

<212> DNA

<213> Homo sapiens

<400> 6259

```

cttttctttt tttctttttc ttttctttt ttttttgag atggagtctc gcactgttgg 60
ctggatctcg gctcactgca agctcggcct tccgggttta tgccattctc ctgcctcagc 120
ctcctgagta gctgggacta caggcgccca ccaccacacc tggctaattt tttgtatttt 180
tagcagagaa ggggtttcac tgcattagcc aggatgatct cgatctcctg acctcaagtg 240
atccgcccgc ctggcctcc caaagtgtg ggattacagg cgtgagccac cgcgcccggt 300

```

caatttctaa ggctccatta gggctaaggt tcatgtatcc atggtgaagt atagaagaac 360
 tcagaatcgt tccaaacata atgggcttgg agtaatggag aactccaagg gcaggaggta 420
 accattaaag aggcctnat ggaaangga aggagcaaca ttncactaa aagccttggt 480
 tnaagtttgg ctttgcccct acagattttg aaccctgagn aagtacttac ct 532

<210> 6260

<211> 524

<212> DNA

<213> Homo sapiens

<400> 6260

cccagttaat ttttgtattc ttcctanaga cggggtttca ccatgttact caggatggtc 60
 tcaaactcct gatctcagat gatccgcacg cctccacctc ccaaagtgct gggattacag 120
 gcgtgagcca ccatgctcgg cctaggtgac ttttcatggg gagataacac acaggcatgg 180
 tgagcagcgt ggcanaggac ctgtgtgcag ggccctgtct cccgccgggg aatccttcat 240
 ctgggaaatc tccgntgcgg gacagggatg ctgtgtcgtc aggacgcagc gtcntccag 300
 ggcacccggg cctcctctga gcctctttgc gctctttggc tgcgtgcttt ctttcccaaa 360
 cagtgcagac atggaggaga cagaaggatga aaatggtttc tgagcccctc aaccgccttt 420
 ggggacacca acctngnggt ntttaaaacc aagccttctt tgaanccgga aaaggaggag 480
 caccggggtg ttggcccaaa nggaccaccc tgaatcacia agcg 524

<210> 6261

<211> 545

<212> DNA

<213> Homo sapiens

<400> 6261

ccaaactgca aattgcccc agttttattt gtagtccata caaaaggga aaaaaattaa 60
 ggttttctaa caccacctac ttggggagat ggggaagtgg gactgtgccg ctcaccatca 120

gctagaacat tagtggtcag cagggacttg gatacatacc aactgactgt cccaacagga 180
 actcagtctc aacagtctac agaggacag tcagggtacc ctggactgct ggcacagctt 240
 ggcacatagg aaatggttaa gctgaccctt tcctggcctc cttcccatct aaaaagaaaa 300
 aggcgccggc gacctcagct gcaggttgct tcccatcca gacgacctta aatatcgcg 360
 acaaaaataa aaggagacca ggaaaaaat naaaacataa aagaaattcc cattctgggg 420
 aaaccggaag caaggtnaaa ggggaacccg cagaatttan anccagtanc aanatttggt 480
 gctgaggcna aggancaaag taggttactg gccgaacact taacaggatc atctcctggg 540
 gaagg 545

<210> 6262

<211> 510

<212> DNA

<213> Homo sapiens

<400> 6262

gattttccat tttttttatt ctagtactac agtttacagc cattagatga taaacaataa 60
 aacatcactt tttagaaaat ccatatccaa agccaacctc aagtacacag taatttaagt 120
 taaatccact ttttaaaaaa atttcctaata aggtttggta ctttaatttt ctgttttaca 180
 cacataactg gaacttgtaa atgggcaact gccttcttat atgtggaatt atagtttttt 240
 cttgtccttt ccccaaacc acatatatta aatcatggga cattatatat caaccctcac 300
 ctaggctttg gggtattcta taaggaaaag ctttgtcag agtttggtg tctccttct 360
 ttccattcc cacaaaagat gtgtgactaa gtggacaaag aactcagcac tgggcctgnt 420
 taagactntg gccntattct caaaaaaatt ttgangggag gttcctctaa anatcttata 480
 actttgccct ttngagaanc atgtttttaa 510

<210> 6263

<211> 515

<212> DNA

<213> Homo sapiens

<400> 6263

```

gagaatgagt ttcactcgac acccaggctg gaggcagtg gtgcgatctt ggctcactgc   60
aacctctgcc tcccagggtc aagcgattat cctgcctcag cctcctgagc agctgggact  120
acaaatgtgc accaccacat ctggctaatt tttttttttt tttttttgt attttagta  180
gagacgggggt ttcaccaagt tggcctggct ggtctcgaac acctgacctc aattgatcca  240
cctgcctcgg cctcccaaag tattatagga atgagccact gagcccggcc tttttgttt  300
tttgtttttt taaaggcagg gttttgctct gttgccagg ctggagtga gtggtgtgat  360
cacagatcac tgcagccttg acctctcctg gtctcaagcg atcctnccac cttagccttn  420
anaacagctg ggaccncagg ngggtggnac catgccagg aaattttttt ggatatttgg  480
aaaaggcagg gtttccaan gttgccnggg ctggg                               515

```

<210> 6264

<211> 460

<212> DNA

<213> Homo sapiens

<400> 6264

```

gagacagagt ctcgctctgt tgcccaggct ggagtcagtg ggcttgatct cggctcagcg   60
caagctccgc cccccggatt catgccattc ttctgcctca gcctcctgag tagctgggac  120
tacaggcacc caccaccaca cccggctagt ttttttgtat ttttttagta gagacgggggt  180
ttcacagtgt tcaccaggat ggtctcgatc tcctgacccc gtgatctgcc tgccttggcc  240
tccgaagtgc tgggattaca ggcgtgagcc accgcacctg gccaagacca atttttaaaa  300
tttaagacac ttcaaagatg caaaataatt tcagaactga ttcctggaaa cttgtaattt  360
taatattaaa gatagtcttg tttgtatctt tccatggata actaaaaatn acacaaaatg  420
gaaacagaaa tgcccattct tgnnttaacn nnggaacnnt                               460

```

<210> 6265

<211> 546

<212> DNA

<213> Homo sapiens

<400> 6265

```

gttatgatcc ctttaacatc caatgcatgg atgtatagca tttatggtaa tgg tacttca   60
atcatgaatc aggccaggca ctgtggctca cgctgtagt cccaatactt tgggaggcca  120
aggcaagagg atcacttgag ctcacgggag ttcaaccagc ctgggcaaca aagtgaata  180
cccacctcca caaaaaattt aaaaaactag ccaggcacag tgatgtgtgc ctgcggtccc  240
agctacttgg gaggctgacg caggagaacc gctcgagccc aggaattcaa ggctgcagtg  300
agctttgatt gtgccactgc actccagcct gggagacaga gcaagatcct gtctcacaaa  360
aaaaaagaaa aaaagaaaga aaaagaaaag tagtgaatca tgcaataagt tgtttaatga  420
acatgccctt gncagccaca gacttcacaa gggccaggga attgntttgn ttttccaan  480
tttgggcttg gttnangaat tggaacntcc agacttttgt tgcataatgg agcaaataca  540
tcttcc                                         546

```

<210> 6266

<211> 368

<212> DNA

<213> Homo sapiens

<400> 6266

```

agntcttcc tttcttctcc tttcttcttc ttctctctct tcttctttt ctttggcttg   60
ggntcttctc ttcttantn ntcttctct ntctttctt cctctntct tctcttttc  120
tttttcttt ncttcttcc tcttcttcta ttggttcttt tttcttcttt cttcttctt  180
ctctctttc ttctcttct tctctcttcn cttcttttc ttctncttc tcttggctt  240
ccttcttct tatttctct tcttctctt cttctcttc cttctcttt tcttcttct  300
tntcttctc ttcttctc ttntcttcn ancttctgn cttctntct tctctcttc  360
tcctaggg                                         368

```

<210> 6267

<211> 455

<212> DNA

<213> Homo sapiens

<400> 6267

```

ggagaaattg taaacctgat tctaaactgt atatagaaac tcaaaagaac tagaatagcc 60
aaagcaaact tcggaggaaa acaaagaaaa tgttgtgtga cttataatTT atgacttcaa 120
gaactccaaa gcaagagaaa atgttagtgc cataaaaaatc tatgaataca tcaaagaaac 180
agaaaataga gccaaaatag attaaattta aatagtcatt tgatttattt tttttacat 240
aagtgccaat gcaatctctt gagaaacaga aagtctatcc cacaaatggt gctggaacac 300
attgatatcc acttggaata aaaaaaaaaa gaactttgac acctatctta caccatatac 360
acaattaatt tagaaagaat cgtagtccta aaaataaaaa tggaaaccat naagcatntn 420
aaagcnaacn ggngaattag aggggaacnt ttttt 455

```

<210> 6268

<211> 567

<212> DNA

<213> Homo sapiens

<400> 6268

```

aacattgtca cacatcagtt taitgagaaa atcatgatgc tatatgttaa ttctcttcaa 60
gtgattactt ttcattatgt cagatgagac tccaaaaggc catagccatg aagttagaca 120
ctttcccata ttttgttcag gaacacaaaa accaaatgca aagaaatggt taagagaaca 180
tgaaattggc ctcttccttc cccaaccaa aggtagtcac taacagtcag gaaggacaaa 240
ctgaaacatg taaaaagcaa atatTTTTgc tagattttat tttcaaagtt tcaaaccttt 300
ccaatttttt ttttattttt taccacaaaa aaggtatcaa tacttttcat tccactcttg 360
tcaactttag ccaaagcctt ctgagctgca gtcattttgc tatttttctt ttcagtcttc 420
aaatcttttag tattaaactt agtghtaatct tctttgnttc tacaggctca tctgataact 480

```

ttatttttctt tgatggagga tttggcaatg angcttaang gtctggaagc ttaagtttta 540
aataagcatc cctaaatctt tngggng 567

<210> 6269

<211> 566

<212> DNA

<213> Homo sapiens

<400> 6269

ggcacttgct caatctcttt atttagtggc acacatggaa tgaatgaatt agctcttact 60
tgcggcatac ttaacaagtc tgatcttgct tatagaaatt ggatcttaat acttcattct 120
cagaatactt caaaacgtaa gccacagttt ttccttcaag gatgtgggaa gcattcctca 180
ttcaaactcg attaatggtt ttataaagta tgtacctcat ttttattagc cattatcttc 240
atgctggatt ctaatattct ttttaatggt gatctgttca ataaactgaa ccctaatttc 300
cctacctcaa caacataaaa atgatgtaaa gtggatcaaa gtatgtaaca agttaatatt 360
aaaaatgctt cticatatgg tctttcacta aaataatcaa cgtaaaaata atgtaaaaat 420
gtgtttttgc ttgaagattt agtgaacgtt caaggaatca caatttttga gctttacatc 480
cagagtctat actatgtgaa aatactacag ngcctcattt aaaaagcncc gtgattaaat 540
tncaaatcca aatgccaaaa tcaata 566

<210> 6270

<211> 551

<212> DNA

<213> Homo sapiens

<400> 6270

catctttgcc ttttaatata anattnggtt tcatcatttc tgagngtaac atattnttn 60
taaaaataga gctctctgct tgtctgaaac ttnttagcgt tcaactgggag gtgaagggga 120
ataaggctga ccgtaattct ggggtgacgt tgccagtttc atagtcatag ataaacttct 180

nangggctcc tggatgctca cagcanggat gagttcattt caaatccatg gtactgaana 240
 agcatgacaa agcgtttcan ggccccatnt gtgcctgggtg tggactcctg aacgcattac 300
 tgaccaaagg caatcaatca cagcgccgac cccggcgggg ccgatccgag ggcctnacta 360
 aaccatccaa tcggtagtan cgacgggcgg tgtgtacaaa gggcagggac ttaatcaacg 420
 caagcttatg acccgcaatt actgggaatt cctcgttcat ggggaataat tgcaatcccc 480
 gatcccatcc gaatgggggtt caacnggtta cccgggctgc cggctaaggt angccacctt 540
 accnatchat g 551

<210> 6271

<211> 537

<212> DNA

<213> Homo sapiens

<400> 6271

aagtgttcgg tttttctttt aattattttac cagataaaaa agaaaaaaat agtgattgtt 60
 tctcttcacc cccaacattt ccgtttacca aggtcgagtt ggagagaaat tcattgaaca 120
 acgatttggtg ctcttgccct ggagcaaatt cttctcctct gctctacgcc acctcaggca 180
 gcagggacag ggcaaagggc tccaggcaga aatcctgggtg gctgggcagc agagtggcag 240
 tgtggcgatc gcttcttctc gccattgcca gagcattcag accctttccc gtctgtcccc 300
 ctaccccaag tccccagtc cctcaaagga ggcagggagt ggggactgca ggaagcagga 360
 caggtgcacg ggtggcctgg gcagctcccc acagatctgg cagaggggac aaccctgct 420
 tctattgcac atcctggctc acccccctgc ccgagcagta ngccacaaaa tgaaacactt 480
 ttcaaantca gaaagcccgt gctttgtgcc agcttnanga ngggaagttn gttgntg 537

<210> 6272

<211> 512

<212> DNA

<213> Homo sapiens

<400> 6272

```

aagtctgttc acgtagcctg ggactgggct agcctttcag taaccatata agtatcacac 60
aaagcgaacc ccagtctcct ctgagtcctt attcctctac ccagagaatg ggttttcctc 120
tcagaacaag ctcaaagacc ttcctgactt ctgcagggga ggggtgtcctc cctctcgtcc 180
cctcacatgg ctttctatca ctcccttgct cctgcaagcc tgcctcatgg aaccctcaga 240
ccaatctcca ttttgccaag gacgggtggg cccacctctg cctcttggag cagaccctgc 300
agagttgtct ttggcgccct caggccttcc ctgggagtct ctgcactgct gacttgtgca 360
gaatctcatc tcagagcttg caaatggccc caacaatgtg ctggaatgta tatggatggg 420
ggtgggctgg aaagtgtga gaaccaaca tttcttaat nnnnttttct ttncnttgag 480
acaagtttta cttnttacc caggttgga ng 512

```

<210> 6273

<211> 569

<212> DNA

<213> Homo sapiens

<400> 6273

```

caatttgccc tctacacttc ccaattttaga agaaactatc actagtttct tgggtattta 60
tatttgtcac taagtcactt taatgcatct tcaaataatgt gtaaaaaata gaactcttat 120
accaccatca accagacagc atatattacc aattaaataa gtgcccaacta tttataaata 180
gtgcatgttt agggatcaat aaaaacatat ctttacacgt aaggacatat cctaacttta 240
tcataatata tccaaactgc aaaagcatgt gctgggctgt tctctaccga ataccataaa 300
actgaatatt gttcaccact atggctcgatc tttctaactt taaagagtac acaactgaac 360
tcaattactc caaagatatg tgaaaacaca gaaaaatgac ccctgttaaa agagtaaacc 420
tagcttttgn tttactttcc ttttatataa aaaaagatgt acagggttct cttctgangg 480
ccagtagtca atttagaggg gatacttcng aagctttttt tgggtggtgg aattgggnac 540
ctttacttcc caagggnccc ttntaccan 569

```

<210> 6274

<211> 566

<212> DNA

<213> Homo sapiens

<400> 6274

```

aaaccacaaa tacgtttatt cctctaaaaa cagtatacca tctttccaat tttcaaaatg   60
ttattatcaa ttgtctgcag attactctca ttaagctgat ttttaaaaat ctcagacaga  120
gcagagcaat tcaccagcac catcatcaag tgagctacaa atctatcttt taccagagca  180
aggagacact taagatcaat tcaagagaat agctttcagt gtccatagaa ggggtactca  240
cattcatttg tcacatattt caggccctca tacaccctt ttaaattgtc taactcctat  300
cccagtttct ttttatagtc taaaaacaag gaatcaccca agtaagatac tccttcagag  360
cactgctgaa aatggatcaa acgtgggaga tccccagat ccctgttctc aagtgttaaa  420
aatattttat attagcacat agaataccct tagaatatat tctggtatgg tctaaagaag  480
ttggggttcc ccttttgatg aggccttcaat tctctgaga cctttcctgg atagncattt  540
ggtctattgn ttnacttct ctggnn                                           566

```

<210> 6275

<211> 556

<212> DNA

<213> Homo sapiens

<400> 6275

```

cagatcagga agttttattg ctgacatgca ggaagagtcc ccatgtagta caaaaatatg   60
tctttataca aacttttttg tgactttttc cgtttcttta caataggact tctctcagaa  120
accgtccat cctcaggaat ggtatactcg gcagccttga tcttgcgga gagctcctgc  180
gggatgctgt cgtagaaggg gaactggcca tacagcatgg tgaagagcac cacgcccagg  240
gcccacatgt cactgggctt gccacggtac ggccggccgc tgagcacgtc gggactgatg  300
taggcagggc tccctctctg gtccttcagc aggtccccct cgctcaccag atgcttcccg  360
aggcaaaaat tggatgatgg tatccgatgg gcctcttggt gagcaccatg ttccccagct  420

```

tcaggctctg tgcacgatat ttttctgggtg caggccttca ccacgcggac cacgtntana 480
agattaccca ggnttccttt tgctgagcct ttntcttgat gactaatgct tcaggttgat 540
aaggcaacgg cttttc 556

<210> 6276

<211> 554

<212> DNA

<213> Homo sapiens

<400> 6276

gagacagagt cttgccctgt tgcccaggct ggagtgcagt ggcgcgatct ccgctcactg 60
caagctccac ctcccgggtt cagccattc tcctacctca gcctctcgag tagctaggac 120
tacaggtgcc caccactaca cccggctaata tttttgtatg tttagtagag acgggggtttc 180
accatgttag ccaggatggt ctgatctcc aggatcagtt tcttgagtct tttctctttt 240
gcctcttagt cagaatccta agaacataac caggaaacaa atgaggcaag caagatcctg 300
ctataaatca aagaactact agactcatga aataatttta aatgcgtgtt aaccatgagt 360
gaaaactaga aattgacagc cccaattttt ttttaagggc agatgggtact ttacatcttg 420
gtcttaggca taaaactatc tagnaacaaat gtctagggat cgagtcatta taaaagtcac 480
ttcatgcttn aagtatttcn aaacttggag ctttnaaggg aattgggggtt cacttattag 540
acaccagtgg aatt 554

<210> 6277

<211> 556

<212> DNA

<213> Homo sapiens

<400> 6277

gaaaatggat tcaattttta ttaaataatg taaaggattt tcttggcact attcacattc 60
tcttgcctga gtaaaacaag ccgcgtttat ctgcattggt agcagaggga aagctactgg 120

agcaaacgct aagtgaatgg gtccccgtgc cgagggtgtc ctcatctctg ggctctgtca 180
 ggccctcccct tgtctgcagg actggacagg ccaccctccc caggccctgc ccttgccgcg 240
 agcgtgtcct tccatacaga caacagcctt gctgggtcac ctggaggagc tgcgctcttt 300
 gctgacacag tcgtcctggg aggtgggtgtc cccgtttccc accatgctgc acgtcctcct 360
 cttcttccctg cgggtgactg tcccatcgcc ctcggtacca gactcgact ctgagtcgga 420
 gtctgacgaa ctggagctgg aggagctgga agagtcgctg gagctgtcgg aagctatccc 480
 tgnngacttc tgaangnaa cccaatcttg caaggctggc caattngggg ggctttgnnt 540
 taaaaancct taccat 556

<210> 6278

<211> 556

<212> DNA

<213> Homo sapiens

<400> 6278

actttttggg acatataatt ttaatgtact gtgactctgc catctagcta ttattacttt 60
 ttatacaaga tttggaaata tctctctcat tcagatattt taaatgtaat agcatttgat 120
 atgatatact cgcacctaatt aatctgggtc ccactaagga cttattgtaa ttaaaaagtt 180
 aaacaagtta gctgatggac aataaatctg ttttaaggag ggaagagaaa acaggccctt 240
 gtaaataatta gctcttaagt gccagctact ttatatgcaa tatcatttga aagatctcct 300
 accatactaa ataaagaatt ggaggccatt atccctatat tataattaaa ggtgggggag 360
 gggagaagat cctcacaaga attcacaag ctagatatta ttacccttcc tctctatttc 420
 tcaacagatg agaaaagtga ggccaaaaga agctaagcaa tttgggtcaan gccatcatgc 480
 anctatgtag tgggggtgat ccgggtnaat ctactggctc ctggatncat gctttttggt 540
 ctgaaccctg ctggtg 556

<210> 6279

<211> 555

<212> DNA

<213> Homo sapiens

<400> 6279

```

aagagagagg gtctcactct gtcacccagg ctggaatgca gtggcagaat cacagctcac   60
taatcctccc accttagccc cccaagtaac tggcatgaca ggtgtgcatc accatggccg   120
gctaattttt ttatttttat ttttttagag gcatggctctc gttatgttgc ccaagctggg   180
ctcggactcc tggcctcaag agatcctcct gtctcagcct cccgagtagc taggattaca   240
ggatgagcca ctgcacctgg cagaagcacc attcctatag tattgtatat ttacaccctc   300
atattttcaa agttaaaagga gcaaaatgtt tcccatgcag aagtagagat ggaaggagta   360
actaccacca tggcacttag atgtgaccaa atttataata aacagagtgt gattataact   420
aatctgcatt ttttaaattt acatatgaaa ttcacaaaaa aaaaaaaaaa gggaangcaa   480
ngggcaaang angggcagca atttagataa tagggctctc taatccttcc agtcttggaa   540
natccggtac tctta                                     555

```

<210> 6280

<211> 559

<212> DNA

<213> Homo sapiens

<400> 6280

```

gtatttttag tagagatggg gcttcacgat gttggccggg gtggtcttga actcctgaca   60
tctaattgac taccacattt ggtctcccaa agtgctgaga ttacaggtgt gagtgactac   120
ccctggccag attaagttaa tttcaattgt tttgcagtcg cttgtactac aaagtgcctat   180
aatgcagata tttgggacac ggtgttttaga gaacttcctg actacctgga tgtgagaagt   240
gaggtaaaaa gagccatgaa tgatgtccaa gtttctagct taggtagcta ggtgaaatgc   300
ggagtcaatc actaagggat gaaactgggtg gttgggggct aggaaagatg attatgtaca   360
gatttgaaca tgggtgatttt catttgtggg agaggacatt caaataaaga tgtctaggat   420
gcaactagaa atatgaagtt aaacctgtta agaagatctg ggctggagat aactgatacc   480
ggacttcacc agattgaaaa tggaggnccct tgggaaccan catttagntn tcatnggacc   540

```

ttgtggaata aacttttga

559

<210> 6281

<211> 563

<212> DNA

<213> Homo sapiens

<400> 6281

```

ggggtgtttt aggttaattt taagaactta aaattattat ttgttcctcc ttaatatgaa 60
actcttccaa aataccttct gaccagtaag taaatgttcc ttaggcactg tgaggtgtat 120
taatgatgaa gcatgaaccc aggctgagaa gtgtacaatt tgattttaac tactgccaaa 180
acagttaaca agctctgtct tatccactga cagcaggaaa tgtctttacc ccactactcc 240
tgagattcta aaaagggaaa actaatttca caaacaacct ttaaaagaat ccatagatga 300
ttctaagaac agcacatatt cagggtatta gaaaagatgt tttcttttgt aaggcatcaa 360
tgattaaact aatagaacgc atatttacta acaaaagatg gttaacatta tcataaaacc 420
atztatcttt ttaaacttct ctaattcctg ctaattttgc cagcttaaata taagaaatga 480
atggcctntt ggcctaatac actatngggt attaaaaact aagacatctg gaacttttag 540
gcncatcaan gnaccgggtt atg 563
    
```

<210> 6282

<211> 551

<212> DNA

<213> Homo sapiens

<400> 6282

```

agagtcagag tctctgtcgc ccaggctgga gtgcagtggg ataatacacag cccactgcag 60
ccctgaactt gtgatectct gcttcagccc ctcagttatg tcttggcaca tagctaggac 120
aacagctgtg tgccaccatg cccagctaata gttttttgtt tgagacagtc tcgctctgtc 180
aaccgggctg aagtgcagtg gcacaatctt ggctcactgc aacctctgcc tcccagggtc 240
    
```

aagcgattct cctgcctcag cctcccgagt agctgggact acggcatgtg ccactacgcc 300
 cagctaattt ttgtactttc aatagagatg gggtttcacc atgttggttg gcgagaatgg 360
 tctcaatctc ttcacctcac gatccgccgc ctccggcctcc caaagtgtg ggattacagg 420
 catgagccac cgtgcccggc tgctaatttt tgaataata tatttttagag acttttcttg 480
 gggctctcggg ttggtatgca aggnccagncn tnaacttctg gntttgaacg aancctccgc 540
 tgggcttcca a 551

<210> 6283

<211> 560

<212> DNA

<213> Homo sapiens

<400> 6283

gagacggagc cttgctctgt tgccaggctg gaggcagtg gcacaatctc ggctcactac 60
 aacctccgcc tcccagggtc aagggaattct cccgcctcag cctcctgagt agctgggatt 120
 acaggcgtgc accaccaagc ccagtttaatt tttgtatttt tagtagacat ggggtttcac 180
 tgtgttggcc aggatggtct tgatctcctg acttcatgat ccaccacact cggcctccca 240
 aagtcctggg attacaggca tgagccactg cgcccgcccc acaataaaac atttttaaaa 300
 atcagaactt ttggcataat ctatttcgct tcccaggaa aaggaatgta gcagatttta 360
 taacagagaa gagaaagtaa agtcaagtca agagtctaag gtatttccat attatcatca 420
 aagttgcccc ggagaagggt ggggggtcaaa agcttaagat tncaggttgg atgacctggn 480
 tttggnatcc aagcacagtt cctcagtact tacctgacct taggtnggta cctaaacctt 540
 ttgagccttg gttccctnat 560

<210> 6284

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6284

cataaaacaa aatttatctt taatttgtaa gtgtcaacag cagtacaaaa gatggagtga	60
tgacaactag attagggtag agaggacagt cttgaggtaa atgagcataa ataggcagtt	120
cttatagaca ctcccctaag gggcctgagc cccatcacgg catatacatt atcacccaaa	180
gatggcatgt tgaacatatc aggaaagcac cttgtgcaaa aaggaaaaaa aaaaagtagc	240
taagggtgcca acatacacca ggatagataa agacagtng tctttcaatt ttgtcttttc	300
ccttaattat gagganagg aggggaagac tttgaaaagt nccactgaaa gattattcaa	360
tgttgagctt tatctcacgt caatactgca caacaaaatc caagaagttt gtgtatgcaa	420
caaagctaag aacaatgatt cattcctgna aatttgaaga agaatttttt tatttttccc	480
atttctttta tccttacaaa ctttttaata ttattatcaa gaggagagtg tganaaaatg	540
tatggcaccc ttaagggcnt tnaaaacntt ncctggacng	580

<210> 6285

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6285

aaaatttcag aactattgta catcaaagga cactatcaac agagtaaaaa ggcaaccaac	60
agaatggggg aggacatttg gaaatcacat atctgataag ggactaatat ctaatatata	120
taaaaactaa aacacaacaa caaaaaacaa cctattggat ttgaatagac atttcttcaa	180
agatatacaa acttaaatgt tcattgatgg ataaagaaaa tatgtataca tacaatgaga	240
tgttactcaa ccttaaaaag gaataaaatt ttgatacatg ctataacatg gatgaacctt	300
gcgattatta tgctaactaa gccagacaca aaggacaaat atcctatgat tccatttctg	360
tgaggtagctt ggaacagtca aattcataga gatagaaagt aaaagtagtg gttaccagag	420
gttgggagag aggggagaag agagagtgat tgnatcaatgg gtatagaggt ttaagtttgg	480
ggaagaagaa agtagttctg gnaaaaggta atgatgggtg cacaatcatg tgaatgncc	540
tnaagntact ggacnttnc aattaaaang accaaa	576

<210> 6286

<211> 534

<212> DNA

<213> Homo sapiens

<400> 6286

```

aaatggattg tttttattaa tttacaatga aatagttttt gaatgacttc acacaaaaac   60
ctagagataa catcacaatt gcaatgttat aaagtttaaa ggcctattca tttcactgtc  120
agttgaaatt cgttaccagg tgaaaattct ggagctgggt tttgcactga ggatgctaca  180
cagccactag cttttttaat ttggtcttat taacagaaat actgacttag tgaaattaca  240
ggcataggcc tcttaatcgc tttttatgag tctgaacttt tgctttcaat accaaatagt  300
atctgaaaaa catgctcact tttgtgcttc ttgagaaatt ctaagaattg gcccagattc  360
atgtgatagt cattccttaa tccatagtca ccatgagcct caaggagtaa ctcttcaaaa  420
gaatgggaaa aggcgcaggt cctcaccatt tccttctgnc tccacgcttt cagcatgctt  480
acaggaaatg ngcttncnat tggggaccta aatgnngnc aaaacttctt acag       534

```

<210> 6287

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6287

```

caacgtgata acccaactgt ttaatgtttg aaatttatat ttcatttctg aaggagagga   60
gacagacca aacttttata tctttccagt tggtgtgaca atttctgaac cttgtccttg  120
tagacacctg gtcaccggaa accatcatgt ctgtaaaaact accacacagt ccagcctcca  180
tcctcaactg ccgccctctt cctctctgca ctggagccgg ccaggccacc tcctcccaa  240
ccgtggaaca ccatggtgac aggagatggc cctggccagg gggaggctgc tgggactgca  300
ccccatcct gaccagacct cctccttttg tcccctgcag agcctccaag gcaggtcatc  360
ctgacactgc aaccacattt ggtggctgtg ggcaagtcct taccattgag tgcagggtgc  420

```

ccaccgtgga gcccctggac agcctaccct tttctggtc cgnggcaatg agactctgga 480
ctatgagacc tttnggaaag gcagcccctg ttcncagga aggcncagcc ccattnaaca 540
agcacgggtt acaaaaagga tggccnccgg aacttttttt n 581

<210> 6288

<211> 561

<212> DNA

<213> Homo sapiens

<400> 6288

gagacggagt ctcgtgttg cccaggagta cagtggcgca atctcagctc actgtaagct 60
ccgcctcccg ggttcaattg attctcctgc ctcagcctcc agagtagctg ggactacagg 120
cgcccgccac cacgcccggc taattttttg tatttttagt agagacgggg tttcacctg 180
ttagccaaga tggctctggat ctctgacgt cgtgagccgc ccgcctcggc ctcccaaagt 240
gctgcgatta caggcgtgag ccaccgcgtc cggccaataa atggtttcta attaaaggat 300
tgtgacattt aatagccgtt gcttgctctt gtcttgctcc cttctctctc gaaacttggt 360
aagaaataac tcaatattct ggcttgggta aagtaaatat aatgctattg gatatttttg 420
tccattgaat tgataagact tttcaagtaa aagttgcttt ttanggtagn atcttcatgg 480
ccttgagaaa gttgcttggc tctcttttga ccaanttggc actggcnttn ttaccggaca 540
aatttgngc tttanaattt a 561

<210> 6289

<211> 567

<212> DNA

<213> Homo sapiens

<400> 6289

gagatagact ctactctgt cgcccaggct ggagcccagt ggtgcgatct cgactccctg 60
caagctccgc ctacaggtt catgccattc tctgcctca gcatctgggg tagctgggac 120

tacaggcgcc agccaccatg cccagctaata tttttgtatt ttttagtagag acagggattc 180
 accctgttag ccaggaaagt ctcgatctcc tgaccccgctg atctgcctgc ctcggcctcc 240
 caaagtgctg ggattatagg catgagcctc cgtgcctggc ctcatatccc ttttaaaaat 300
 tactatgata tatccctttt aaaaagtact aactgaaaaa agtactatct ctttaaaaag 360
 tactggctca aaaaaataat agaaaataag aaacaaaaaa caggctgaga aaagtgggct 420
 cacatctgtt ggccatgctg gtttcaaact cctggacctc aagtgaccat gggccttggg 480
 ctccgacntg ctnggaatac anggngaag cccaaaactg ggcccatcct ttttaacataa 540
 acncttgaag ggnaataaag gcttgac 567

<210> 6290

<211> 537

<212> DNA

<213> Homo sapiens

<400> 6290

gtgcatagtg tatcttttcc tagggactga gaatgcagaa tatattaaat taatatggca 60
 aactgtatit ttttctgttt gttttcaata cagctaaaca aatctatit gtgcattctc 120
 agtgctcgag gcattttcac agcaatcctg tattaatgcc catcgactgg ctttcttttg 180
 gggcattgcc ttcttgcttt gcttttctat ctagtaatcg gaggacaaag gacagaagct 240
 gggcagtgga tgagtagatt gaatgggaaa tcctttaagc tggccaaaga ggtcactgtg 300
 gcatgtgtac tgaaaactct catgggtgtcc gccctatccc ctctcccctg tcagagaaca 360
 gacccatcca ctgcatagaa ggcgcagccc tgcttgactt ttttcaaagc tggctggact 420
 tacatggatg tcagacctgc agtgagccag atttgctttc ctgggattga agtggaanaa 480
 ctgaccaag ggcnnnact gggaaanngg ctttcangga ttntactctt gggaat 537

<210> 6291

<211> 558

<212> DNA

<213> Homo sapiens

<400> 6291

```

ggtcaggatc tctctccaag gttactgaat tgaactataa agttccccta tggaaataat 60
atgtcaaaaa aaaaaaaaaa ataagaatag ctgtctagta gcagagtgca ttcagtaggt 120
agctggaaat caagtacttt attcctctgc taggattaag taaccattcc cacctgggtcc 180
acttcttgac caattttcta aagtggagtc agtctgtctc tattgctctt tctctaattgt 240
ggacttttaa atcaaagttt aggttaaaag agatagatta gaaaacatac atttaacaca 300
cacatacaca aacacaaagt tggaaagcaa gagagcttct tcagtcaagt agaccactt 360
ttgggtgttct ttacaaatc aaccacacct caactaacca aaaattaggg caaatcagac 420
atgtattata aaaacaatgg gaaagaatat tagaatgag aactattcca ngaaatctag 480
accgatactt taataanaag ccttcaaaan ccatacccccg attnccgaac ntttggggaa 540
cagtaaancc tcttaatn 558

```

<210> 6292

<211> 570

<212> DNA

<213> Homo sapiens

<400> 6292

```

gtacacagag agagggaatt tcagaatttt tacatacatt ttagcaaaca agttttgatc 60
tattggcttc ttgggtgcagt aatgcaacgg caatccattc tggtgccaaa ggctcatact 120
attacaagga agttgtgaac actaatattct taggaggtga ggccagcccc acatgaactt 180
ctcttgcatc cctctgggtcc accatgacac ataaatactt agactttttt ttttcctcta 240
atgaatcatt agacattaaa aacggaataa cagagtcaca aagggccaca tgcttttcgg 300
tataaagcat tctccttctc taggttgcta tcacagtga gacctgactg cctgaatatg 360
ctcaggagat ttagtcaata ttgtctgtat ttggttatgg aaaaggctct cctttttttt 420
ttttttttta aatccaaagt gcatagtga aacaaaccaa agcatttttt tttccttctc 480
agcatcagnt tcactgagc attttccatg anaggcctgt taaatgcctg nctttggcct 540
ttcaaccttc aaaattaaaa attnnatnna 570

```


<210> 6293

<211> 586

<212> DNA

<213> Homo sapiens

<400> 6293

```

gacagggtct agctctgttg cacaggctgg agtgcagtgg tgcaatatca gctcactgaa 60
accggggttt caagtgattc tcttgtctca gcctcccaag tagctgggat tacagggtgcc 120
ttccacaaca cccagctaatt ttttgtatct ttagtggaga caagggttca ccatgttggc 180
caggctggac ttgaactcct gaccttaagt gatccgcctg ccttggcctc ccaaagtgct 240
gagattacag gcctcagcca ccgtgcctgg ccctatcctt tcctctgaag attccatttt 300
atctttctga aaagccagct ccctgggtgct cttttccttc tataatgaga cctcaacaat 360
gtaaattgag aaggtgattt tcacaaaatg cattctgcct tggctccttct aaaaatcgag 420
tttttgaaa ctgctgtttc taacaagata acatccaaca gaagctacta atttcctttc 480
aaaccttagc ttntggaaat gtaagagata ttaccnggaa atgaatgggt cttggccaat 540
ggatgtaaac tccgagaaac tntnngggna agtaaaaggg ggncaa 586
    
```

<210> 6294

<211> 586

<212> DNA

<213> Homo sapiens

<400> 6294

```

gcccttccaa aaactgcttg ttaagtttca ggtacacaat taacctgccc aattaatttc 60
gcagaacctt gaaataaaac atgtttttaca gtaagttcac acacaggctt attgcaaacc 120
agagtaatgc acagatgatt gccaaagacca tattgacaaa ttgtgattag attataacgc 180
atagtagcct gccttacatt cagcaagttc aaacaggaca caaaaccagt caactgaaca 240
cagagcagct ctcttcagaa gcacttccaa tgagtgatgc agagatttca aaaatacaaa 300
    
```

gcaggcaact tatatacagc aaatcctcac actgcctgga catgtgccac ttttttggtg 360
gttttaatat atttttcctt tctggntgcc aatttagact gaattcttaa ngatttatct 420
tggatgactt agaaaaatcc cctgnccttt cttactttgg ttcaagnagg accagncatg 480
aaaattgagt naggcctctt aaaaaatgga aggtcncaga tcccatgggg gaagggttan 540
gaancccttn ccaggtaatg gatcccgga atnttaacag gttaan 586

<210> 6295

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6295

gaagcctgtg aaattttatt tatacaaaaag aataaaaagt tatttaaaaa gaactgattt 60
aaacttatgt ttttccattt ttctgttcc ttgaacatga atctactacc aactcagaaa 120
gatttaagat aggttaattac taaacactct ttacctcccc ttgcaaaaaa cagaggcaag 180
tttcccatth tacttatgat aaaccagatt attttcagtt atgaatattg gcaactgcat 240
gaaagagatg atcagatatg tcagcaggaa agtatgagct gtacaaaggc attacaaaaa 300
aaaccccaaa gaaaataaga taaaaacaac aagagaaaaa caagaaaaca taaaacaata 360
taagaaaatg ccagatatth acagcctcca tctgaaatgt gacttgngtt ctactttcag 420
cataaaacaa aaccagagaa catttcttgg aagggtatca cagatgaagc tgggtgccagc 480
cagttttggg ggagacattc attctaagaa gggagaaaacg cncagntagc acttgctggg 540
attccaccat tggtttcatc ttnccggaag tctggtacta aaaaaggn 588

<210> 6296

<211> 582

<212> DNA

<213> Homo sapiens

<400> 6296

ggtctatctt ccctactatt gatagggaca tgggcacaga gaaataccta attagaatag 60
 gaaaacaaca gtgcaagtgt cctgataaag ggcaagtac ctcagctggt aagtggtaaa 120
 tgatttgagt gtcagggaag ctattataca ttccgggtga ctcttacaag tttccaaaaa 180
 tcaaatccac ataggacaag aattttcacc actgagaata tgcagaagaa tgtaggacaa 240
 ttctcagagt aactcacaag aagtattcaa atatgattaa tgcaatggca cattgttgaa 300
 acatacgtat ttggatataa aaatctcacg tgcttggtta agttataggc acaatgtatg 360
 agcttccatt tgtaatcttc aaaagagata ctcatgagag gaaaggcaat cagaaagang 420
 gaggattagt aatggataaa aacttcatga atgnactaaa acccctggac tgtcacttta 480
 atgggcaaat ttatggatgt acatatcttc aataaaccta atttttttta aagaagggga 540
 gattgtaacc taaaagaagt gnccttgaaa anggagggtt tt 582

<210> 6297

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6297

gttttgtttt gtttttttgc caagaataag agtccctgat catcctgtgc actttactag 60
 tatactgcac aaaacacagc aggttctcaa taaaaataat agttactaaa ttttactatt 120
 actttttcta ccagatttta atactgagta tgaacatcac atgtagtctt ttttcgcttt 180
 cagtcactta aactgtatcc cagactcttg tcctatcaaa aaaactcaat catctttcat 240
 tcttttttta aaaaaaggac acttttaatc tttatttgta actttttctt attgtagcaa 300
 aagtgcataa tattacattt accatcttgc ccattttgta ttgtacagtt cagtagtgct 360
 acctgtattc accctgttgt gcaatggatc tccaaaactt ttacatcttg caaaactgaa 420
 atgctgggtat ccattaaaca atttcccttt tccccatcc ctcattctct ggcagccaca 480
 atcttattct ggctctatga atngctactt aaagnacctc atcnggtaga atgatncatt 540
 tggatttttg gggctggctt aatcacttan caaca 575

<210> 6298

<211> 579

<212> DNA

<213> Homo sapiens

<400> 6298

```
ccagagacag gacctcaccc tgcagcccag gctggagtgc agtggcgtga ttatagctca 60
ctgcagcctc caactcattg gctcaagcga tccccagtc ttagcctttc gagtagctgg 120
gactactggc acatgccacc atgctcagct aatttttaaa tttttttgt agagacgggg 180
tctcgttatg ttgcccagg tggtctcaaa ctctggcct caagcgatcc tcctgcctca 240
gcctcccaaa gcgttgagat tagaggcttg agccaccatg cccagcctat tcactctttc 300
tttagaaatg tgaagtgacc cctgaaaaac ctggaggaag aaggaaaagg aaggatcctg 360
gataattatc taccctgttg gaagccattt taactatact gcattaagac attcattgct 420
tctggcactt tcttactggc tcctaacttt gttcatggt tccaaaggca ttaataatt 480
cttttnctaa tttcaaaggc tgtgggggtt naagaataaa ttatcaagcc tactgncaca 540
ccaccaacct nggacttanc aatggncct gaangttgg 579
```

<210> 6299

<211> 584

<212> DNA

<213> Homo sapiens

<400> 6299

```
cctgttttga aagtgtttta attagacaaa agcatcagga caaaccattt taaaaacaaa 60
gtcttcaact tgggtgttga gattggcaaa aggggaagca agggaaaagc caaggaaaga 120
taaaatattc agaagaaagt caaagttatc tgcaattaca tgttagaaca gattttgcag 180
gttaaaaaga tgttgcttaa atatattcat aagcctgttg taagattttc acttatgcag 240
tttcagaaaa ttagctgct taacatatga cagaactgta ttttaacaaa tgacattaaa 300
agtcaggaga gctactcagt taattgataa agtagaggca acgtggggga gccctcccca 360
cgtttattga agatttgttg ctccccagc cctgtttgcc tgcacaggc taacaacctc 420
```

attcctccca tagagcctgg ccaaatacaca ggctttctgc tgtaggcact cattgagctt 480
gctgccgccc ttgncctttc ctttcctttc ccgntttgn ggggggcctt tggaaatggg 540
gaaaagtcct gggnaacctn ggcccagttc tgagtagggg gagn 584

<210> 6300

<211> 571

<212> DNA

<213> Homo sapiens

<400> 6300

gccttgtgat tcaccttact ctcgccatt tcctgagcca cgtctgaaga aatcctgtac 60
tgccaagata taccctcaga caaagaaatg tccattagtc actcactaaa agggtaaaaa 120
gcaatcgaag tggtttccta tctgaacccc tgggtgccagc acagtataca gtagacaata 180
tatgccataa tttattgcct gaactcccca ttgatgtgac catgatattgt caatggaaag 240
tgagttcata aaaaataaat tctcattctc ttcaaataaa tttattgaga ttctatgaca 300
ctcccagaac gtggatatag caaacaacac tatgtacat ccatgaaaaa acttacaatc 360
cagtaggaga aaaagacaag taaacaagca gttattgtag agcataataa gaaataaatg 420
aaaactgccca tatgggcatt ttagttggta cagtcaatgc caaatagaga gagcagtanc 480
agtttcctga aaaagtgatg gctanggtga gacctaatg ccggtaggaa ttnaactggg 540
gnaaatgttg gaagcngcnc actttangga c 571

<210> 6301

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6301

gggacagagt cttgctgcga tgcccaggct gaagtgcaat ggtgctatct cagcttgctg 60
caaccttcac ctccctgggtt cgggtagttc ttccgcctcg gcctccagag tggtggggag 120

tgcaggtgca tgccaccaca cctggctggt tttgtatatt ttggtagaga tggagtttca 180
 ccgtgttggc cgggatgggc ttgaactcct gacctcaagt gatccactga cctcagcctc 240
 ccaaagtgct gggattacat gtgtaagcca ctacgcccat cctccatcat taaacttttt 300
 aatgtgaaat tctatcatgt accattaacc taacaagatt ttctttccta tttctgactg 360
 gtgcctttcc ccttttcagg agcaatgaaa gctactctgt tagttatgtt cttctgatgt 420
 gacaaaatgt caagaagata ggagaagaga atatatttgn ttgntgatgc ttttggtccc 480
 aagtgtgacc ctaaacttaa gctttgtagg aactgaggtc tctcatgncc ctttccttta 540
 ctcatgcccc actntnactn nggcanttgg gctt 574

<210> 6302

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6302

ctttaattat actttaagtt ctgggatata tgtgcagaat gtgcaggttt gttacatagg 60
 tacacatgtg ccatgggtgg ttgctgcccc catcaaccca taatctacat taggtatttc 120
 tcttaatgct atcacttccc ttgcctctca cccccgaca ggccctgggtg tgtgatgttc 180
 cccccactgt gcccgatatgt tctcattgtt caactccac ttatgagtga gaacatgcgg 240
 tgtttggttt tctgttccctg tgtagtttg ctgagaataa tggtttccag cttcatccat 300
 gtccctgcaa aggacatgaa ctcatcttt tttatggctg catagtattc catgggtgtt 360
 atgtgccata ttttctttat cccgtctatc attgatgggc atttgggttg gttccaagtc 420
 tttgntattg ngaataagtg ctgcaataaa catatgtatg catngtctt tatagtagaa 480
 tgatttttaa acctttgggg aaaggccctt ggaaaagggg acttttgggc cagcaatcca 540
 agcngtgana aaagtgagcc atgcnnaccc tttgggaaaa a 581

<210> 6303

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6303

```

aaattttgga atagtttcat tatacttata atgagcattg cctttgagcg gcatttgggt 60
gctcatcaag tttcagattt tgaagcattt aggattttgg attttcagat tggggatgct 120
caacctgcat tcatttttct taaaactaca tttaaattatt ttagtacatc acagtttatt 180
ataaaataac cttgagtatt tgtctacatc ccttgaggta ttacaccagt tttcaactaa 240
gaaatcagca ggaatagaaa cactgcacac aaaacctaca aaacctccta tcaacaggga 300
agagtgaaca agaattgtatc ctgtctgcac aggacagtc ggcatgaaaa atatagcaag 360
tcaaagggct ggcaagatgg ctgaatagga acagctctgg tctgcagctc ccagcaagat 420
caatgcagaa ggtgggtgat tctgcatctt caactgaggg tcctagctca tctcattagg 480
actgggtaga cagtgggtgc agancacgga gggccagcag aancnngggt tggccgtcgc 540
ctcatccggg aagtccanga gcccggaac ttccttcct acc 583

```

<210> 6304

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6304

```

gagacagagt cttgctctgt caccaggct ggagtgcagt ggtgcgactt ggctcactgc 60
aacctccgcc tcccggttc aagcatttct tctgcgtcag cctcccagat agctgggact 120
acagatgcac gccaccaggc ctagctaatt tttgtatttt cagtagagac agggtttcac 180
catattgacc aggctggtct ccaactcctg acctcgtgat ccgccaacct cggcctccca 240
aagtgtggg attacaggcg tgagccacca gaccggccc ttaagtggc tttatgtgag 300
tattaactgt ataactcgac cttcctgtgt ttttttaac atttttcaaa aataagatgg 360
agaaaaaaag taggcattga aattgcgtga gagactgcct gccatgtaag agtttagcaa 420
aatgcctgga ctgcagaatg tgctcaaata acggtacaaa attactcaaa aacaaattac 480
taaattagtt atgggcccta tttttcangg acttntggct tcaganttct agtaaggttt 540

```

tnacaactgc agaagttgta agtgaanatt tcaggatggn t

581

<210> 6305

<211> 474

<212> DNA

<213> Homo sapiens

<400> 6305

attatacttt aaagttctag gggtagatgg tgcacaacat gcaggtttgn taccgtatgt 60
 atacatgtgc catgttggtg tgctgcaccc gttactcgt catttacatt aggtatatct 120
 cctaagtcta tccctcccct ctccccccac cccacgacag gccccagtg gtgatgttcc 180
 ccaccctgtg tcctgggtgt ctcattgttc agttcccacc tatgagttag aacatgcagt 240
 gtttggtttt ctgnccttgt gatagntttc tcagaatgat ggnttccagc ttcattcatg 300
 tccctacaaa agacatgaac tcattccttt ttttggtgc atagnattcc atggtgtata 360
 tgtgccacat tttcttaac cagtcgatca ttgattnggg ttggttccaa gtcttngcta 420
 tcgaaaatag tgcttgcant caatggaccg ngggcntgtg gntnttcatg gggc 474

<210> 6306

<211> 565

<212> DNA

<213> Homo sapiens

<400> 6306

aacaaaattt ttatttaata aatgggttaa atcgtagtgc caaaaatata ttgacattta 60
 gcaatttcac tgaaaggaag aaactacaga atgcacggtt tcagaaagct attttaagtt 120
 atttacaaat aaagtatcta aaactcaaaa acaggctctg tatgctatat ctagttttatc 180
 ccttcccga caaaatttct gttatttggg caaattctta aacctgggt taaaccgtaa 240
 tggttacaaa ccacaaacac atccatccag agactgaaac cgtttctatc cggtagtgg 300
 caaaactgtt gaaagggcaa tagttgaagc tgttggttt tatatagtgt gaactctgat 360

aaatattcct accaggacta aaacacagca cgctttgcgg gcatggctga ctcacaaagg 420
 ttgtaacaaa caagaactac tcttcactcg acaccatggc tcaaaggcca ccgagaagca 480
 cgagtgactg acagcttctc tgnttacaaa cgaatggaac cccaagngga tggcggttta 540
 cagggtgga aggggttang gcttc 565

<210> 6307

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6307

agctaagag aaatgccaca cagtgtcttc aatattgttt acaactgcaa attgccttca 60
 tgaaaataat ttaattgctc ctgagaggcc tgatagatgt ccctgaattc tgtccagcca 120
 tgccatgact gacagaacag agaaaccagg aaaagggtcac acacggtttg agaaaccatc 180
 aaaatgtggt gtccatctcc tggccaagac aggaatttac agcaccattg tgggtgttcaa 240
 aaactgtcag aaaccttagg aattgtcaca gttaccacaa ctacacattc cagcaaagag 300
 gaatggaaga cagaggcaac atgaaccagg agggtagaag gtctgtcccc cagcactgaa 360
 gcaggcacia aggcataacg tgaaacactc atggagaata aacaaacagt ttaaattgca 420
 caattaaact ataaaattca aactgactg caaactggct tttaaaatgt gtagacctat 480
 caccctacta tggnttatct cttttaccaa aaatctgnca ggttcaacta ttttgggtaca 540
 tangnatttc ttcccttgg naggcagact taactatntt nta 583

<210> 6308

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6308

gatggagtct tgctgtgtca cccaggctgg aatgcagtgg cacaatctct gccactgca 60

acctctccct cctgggttca agcaattctc ctgcctcagc ctccctagta tctaggatta 120
caggtgccca ccacccgccc ggctaatttt tttttttatt ttttagtagag atagggtttc 180
gccatgttgg ccaggctggg cttaaactcc tgacctcaag tggtcctaac acctcggcct 240
cccaaagtgc tgggatttca ggtgtgagcc accacacctg acctcattta cctatttggg 300
aacaataaga aaatagctac ccccaaatta gtgccgtatt gacagtaagt tatgtgcaaa 360
taatattctt taaaagatta agatgtgaat gtgcttacat acaataggag aggtcatcca 420
cgattactca atgtatactt taagttggaa aatcacaata ctgatgaaat aattccatga 480
tatagattat catttttaca ttcatggnaa aaattaagaa caggtcaaga agcttaaagc 540
taatgagctt accttntcct taaccaaaaa gaaaaa 576

<210> 6309

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6309

gttggtgttg tcaaaaatca atattgctga aacccaaaaa gggacttggt ttcaaccatt 60
ggtttctca atgagggatc ggtcagtcct attggcaaga ctctttttcc agctagtaca 120
agatgctagc tcttttcta gctgacaatt gacagtatct ataaaccttc caggccattt 180
aactctcaat gagtaatgct atgtaacaaa tggtttatca tacatgtttc catacaatga 240
atttcaataa ttaaaatgta aaatgaatat ttggaatgcg actttgcata atgcgtgcac 300
actgactcaa aattacaccg aacaactaaa acagatttat tgttctacgg tgatttactt 360
ggtcagtca gattagtaat atggatctgt ttaaaaacac aaaaattaag acaagcagga 420
taaattaatc aacttacaat atgggtctcat actgcaatca aatccggcaa ataacagtag 480
aaaatcttgg ntcacagaat ctctttaaac tgnttttatg cataaattaa anccttaagg 540
gnanatggat taccgtccaa cagaactact ggagcttaaa gggtaatgga t 591

<210> 6310

<211> 592

<212> DNA

<213> Homo sapiens

<400> 6310

```

gttagtcaca tatttacata agatatcata gtcattgtag actaatgaga ggagaagcat   60
tttggttatg tcatttcggg ataattttat cagttgtgag agtttaacaa taaagaacat  120
aaaacttgct gtttcataaa aatatgaaat tttcctggag aaattttgac ttaataaagg  180
aacaagaac tcagtttgta gtgaataaaa ttttacattc acttccccac tttctcatag  240
aagatctaca gttggggata accgataaga ggcaattggt ttctggctta agagcctttt  300
tcattaggaa ttttcggtaa attaaagtct gaaattagaa aaacattaga cattaatcaa  360
cagaccaaca ccagtcacgt aaataaatgg cattcgtata atttggcagc tgaaattctt  420
aaataatctg gcaggtacaa ggagagaaag aggaaaaatg aaccgttcat cattctcact  480
gcggtctcac cgtttncctt cacaccccat tacagcgaat ggaagagaaa ggaccatcgt  540
aaaatntaag ncgncctaa atncggcact tagcttccaa accttcttgg gn           592

```

<210> 6311

<211> 589

<212> DNA

<213> Homo sapiens

<400> 6311

```

atttctgttg ccatgttttt tccagggttt ccccgccccg ttctcagagc tcgcagtgga   60
tgcagtcact acaccactcc cgggcttgta acccatcaca gccttgactc ctttgggtcaa  120
agccctcaca ttctcttgat ggaaaaaagt ttgtcaacg atattttcaa tctgctttgc  180
ttttttatct ctgcctagct gcatttttat ttcactactg ttcattttgt tctctaggag  240
tcgctggtgt tgatgctgaa aagttacagg atctcttcca ggaggaggat ggcagtacag  300
cagcttacca ctgacatagt ctttcaggat gtagcgcgca gatcgaggct ggtctggctg  360
tccatgcgct gtcattgaat ctgcattgtc tgtggagaga aaagaatttt gcaaaatctt  420
agatgacaga atatcacaac aaagacaact gaggtgatgt agcttctatt actaagcatt  480

```

cttactcttg gattttaaaa aatangnat cantggagaa tatatattgg ttaacattaa 540
aaccctngat aatccaggag aatattacct atatctggaa tcctaaaag 589

<210> 6312

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6312

ccgattgtca cttctgttta ttgagttaca agttgagatg tgcaggttcg gtggcgccag 60
cccccccatc cccccccctt gggcaaaaat agtcccagc gccgaggaat ggggggtagg 120
aagggtctcg gataacggga tggggcctcg agggtccttg tggggctcgt gggtcccagg 180
atcaagcacg gctgacacgg aagacagcgg ggtggggggc ctgccttggc cgtggcgttg 240
gggggaaggt gagggagagc ttctgtacaa ggtcatcttc cgtgagggtc ccggctgcgg 300
ccccaaaacg ccgatgggcc ccgcgggacg gaagcggaga gcggaatgtc cgctgggctc 360
cctcggatgc cacgccccgc caggcagcct gggggcgctt cctgacctgg ccccgccac 420
cggagcgaac ggcccgccaa gtggtcttgc gcttgaaacc tgcgcaagct cgggcctctt 480
cttgttgcgg ttngcttacc aaccgatgcc ccgccggcca acggtactt ttgcttntga 540
agcnccggan tggttccgt anaaccttg gccaggcttc g 581

<210> 6313

<211> 555

<212> DNA

<213> Homo sapiens

<400> 6313

cacatttagc tgtttttaat gcttaaaagc tctgtacaaa aaaaaaaaaa aaaatcacia 60
atgaatcctc acaacacccc cgtgaggtag gtaggcaagt attattctcc cattttacag 120
atggggaaac tgaggcagag aggtgatgtg atcagccagn ggtcccaaca cagctgaaag 180

tcagagccaa ccatgagaac acaaaggatc cctccccatt cagteccatc tctgactccg 240
 catctagacc ttgtctgcaa agaaattaaa acgtcttaat tcatgcaaaa ataaaaacaa 300
 taaacctgaa aaggtagtga acagacacac agtagttctg caaaagaatt cagccaaggg 360
 ggtcaaatat tttccaatac tggataaatg ggaacaactt cggcctcctc cccttttcaa 420
 atatcatgac caatgacaca tccttttttt ttttctctgc anaagtnac gagcctacca 480
 aagacagggtt ttctggtccc agggagccaa ccanggngga cagcttctta atggnactc 540
 cngggtttag aaggc 555

<210> 6314

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6314

agacaaagtc tcactctgtc acccaggctg aagtgcagtg gcatgatctt ggttctgcaa 60
 cctccacctc ccaggctcaa gtgattctcc tgccttagcc tcctgagtag ctgggactac 120
 aggtgtgggc caccatgccc agctaatttt tgtattttta gtagagacgg ggtttcgcca 180
 tgttgcccag gctggtctca aactcctgac ctcaggatgat ctgcctgcgt cagtttccca 240
 aagtgtctggg attacaggcg tgagccaccg taccggcca agatgtttaa attacacatt 300
 tgcataaaga gtaattggat tgcaaagctg aatgccttca aatataacat attttactgt 360
 tatgcaaaag ttaccatgtt attcctaagt gataagccag aggaaaggaa ggtgtttctt 420
 ccttctggca aaaatatccc atagttaagt ccaggaacaa atggctgaaa acagaaggca 480
 atgaccatgg acaccttttg gatcctaata ctttagtaa agacncagtt aaacagtcca 540
 cctgggaact ctaagcaca atggcaacaa ctgnagggca caaggcnc 588

<210> 6315

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6315

```

gagatggagt cttgctctgt tgcccaggct ggagtgtaat ggctcaatct cggctcactg 60
caacctctac ctcttgggct caagcgattc cccgcctca gcctcccag tagctgggac 120
tacagggtgcc tgccactgtg cccagctaaa ttttgtatit ttagtagaga tggggtttca 180
acatcttggc caggctggtc tcaaacttct gacctcgtga tccacctgcc tcggcctccc 240
aaagtgccgg gaccacaggc gtgagccacc gtgcccggcc aacacagacc tctttaaaac 300
caaattctct accagcttcc taaaaattt gtatggcatc aatgggtaca catactacca 360
tctgatcact catatccaac tgaaataggc attctgatca cgaaatitit ttggtgtagt 420
cattgactat atttatgaat tcatacatga tcattcttca actaagtatg aactaactcc 480
tggaattctg gtctagttag ggcttaagaa attatttctt tctaaatcca agggactgct 540
aatcagtana acctttgtgg aaactaactt ccaanatgcc ggggggn 587

```

<210> 6316

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6316

```

ctttttatta agatctgaga taggaacggt catacttagt actgaaaggc agacaataaa 60
atgggccatg aaaggggggg gaaagggtact gtctattgtt cgagggatc aaccagagat 120
aaaacctata tacaagcatg tgtgtagctc gaaataaaaa taaaaggact atttcatgtc 180
atgactgctt gttggcttcc tcttcatatg cattccctgt gccattctgt acataggatg 240
aaccagaacc aaggccatac aaatgaccac aatatttggc atcatcaata tgatcttcaa 300
agaacatttc tctcattttg aaaaaggcca ttctgtgag caatgaatca gatcctgcct 360
gatgttgtgg tcctatccgt tccagctcta actgttctgc cacctcctgt aatccacctt 420
tgagattitit gcagctcttc atgagggnact tcacatcata aatgacagga aaaaacaatc 480
gaaggatctc aaagaagcaa gtcttcttan gcaagntaaa attgggtang aatttgatta 540
agnaccaag tennanccgt tttaaaggcc accctttg 578

```

<210> 6317

<211> 551

<212> DNA

<213> Homo sapiens

<400> 6317

```

aacagtaaga ataccactat ttatttagca tttactatgt accaggcaca gggctaagag   60
ctttacatga aataatcatt taaccctcat tcgatcattt aatatctaata aaggtagcta  120
gatatagaca aggaaatgtg ttagtaactt gcccaagatc acagggtggg aaggtagtat  180
tcaaaacttc agacctcaag ttcttaatga ctacagtaga tagaaacatg ggaaagtact  240
tacaatactt tgatttgaaa aagaagaata taaaatatat actaggtaca gccctataaa  300
aatatgtgtg tgtgggcaag gacagaagat gagctataca aatgaacaca gatgttatag  360
tggtgtggga tggttatgag tgaaacagtt ctctaagtnt gntaatatat ttaagaaaa  420
aatTTTTaga agtcatgaat tcacaaataa ctcttctacc attactatta ttattctgnt  480
ttcaaccatt ggacaccaag gtgngnggng ggttncataa cttccggnga cacagttant  540
gggctccttt a                                                              551

```

<210> 6318

<211> 534

<212> DNA

<213> Homo sapiens

<400> 6318

```

aacttacaaa caaaaatacc gtaataataa acccaaacia agaccctcag cttgctgcca   60
cgttctctat gcggtttggc ggggcgggta ttacaagcc tacagctggg actgaaaccc  120
cgcacgcagc cgccggagtt tccaaactgc gatcccttct cacccaaaga aacaagggga  180
gtatgatcca tgatcaacia catgctaaag ttaaacaaga aaatggtaca aaatagaaat  240
tattaccata catgtccagc atgcaggatt aatattttta atgcagattt tttgtatttt  300

```

tctatataat cgagcaggca ataaaactga tgagatttgg gcgccgagcg tcctaactga 360
 ggccgtgtgc tcagggctga gagccagtgt tctccgaact ctgacagaca ggtccgtctg 420
 tccttccttc tttcgctcaa gctcgctntn gcctgccggg acgccagaag tccctcttct 480
 tttcctcgtg ntcnttttct ggngcggcta cttttcnggc agcaaaacaa ntgg 534

<210> 6319

<211> 512

<212> DNA

<213> Homo sapiens

<400> 6319

ganacgtctg tttctgtcac ccaggctgga gtgcagnngc gcagnngcgt gatctcggct 60
 cactgcaacc tccacctccc gagttcaagc aattcccctc cctcagtcct ccaagtagct 120
 gggattacag tcgcgcgcca ccacaccngg ctaatttttt ttttttaagt anagacaggg 180
 tttcaccacg ctggccaggc tggngaaaac tcccaacctc aggggatcca cccacctcag 240
 cctcccaaag ngttgggatt acaggngtga gccactgngc ccggccccta gnaagttttt 300
 ttttttttaa agttttgnga aacactaaca gggtttgaaa nagggcattt tccaaaacaa 360
 attactatat tatatgnngg aatcattaac tttcatatg ataaaagggg gatgaaatca 420
 ctaangactt aatagaaagg ttaattgggc ngaatccggn taaaatangg ggtaaaccce 480
 actnnggcac tggctggggt accttgggcc ca 512

<210> 6320

<211> 530

<212> DNA

<213> Homo sapiens

<400> 6320

ggcgtgcagg gccaaacttta atacgggccg gcctgtctgg gggtcgaggn ggccgctccc 60
 tttgtccttg nggctttcca cgggcagggg cggtcccagc gagatcgtct cataaccaa 120

ccagccctgt gcacganaag tcacgccatg cccacagcc tccagtcctg gctgctggtg 180
 gctcggggac ccgcagggca ggagggtccc gggtctcgca gttccatgag cccagccgc 240
 ggggaccccc atggacaaac ttccggggct gcacctgccg gagcagcgtc tccaagcat 300
 cggaggncct ttntcancag ggctgagccc tagtggacan agccgtgagt ggcaaggcgg 360
 gagtcagggc tctcggagtc gtcaattcag caagaaagcc cctggcccgc accttcaaac 420
 tgggaagnggg tggctagggt gccggangca nangcccaa aagggttaag cacaatcctg 480
 gctcctgggg atcccccaac ancagggnaa cttaagtgcc cccgnaanc 530

<210> 6321

<211> 516

<212> DNA

<213> Homo sapiens

<400> 6321

gntttctttg agatagggtt ttgctctgtc acccaggctg gagtgcagtg gccacaatc 60
 acagctcact gcaaccttga acccctggga tcaaacaatt ctcttgccctc aggcttagag 120
 tagttaggac tacaggtgca catcaccata cctggcaatt tttttttttt ttttaattatt 180
 tttgtagaaa gcagagtctc gctacggngc ccaggacaat ttcaaattcc tggcctcaag 240
 caatcctcct gtcttggtct aaacatgttg agattacagg cttgagccac catgcccagc 300
 ctgaaaaact tttaagacaa gacattagga attctaaagt tttaaaaagt tgcaaattat 360
 aaaacaatag caaaagcaaa aaattatact aacagctggc atatatgatt ttatctgcta 420
 atttactttg ggacaatggc agggttaaaa gcttgcntag aactccaatc ngctccttta 480
 gcactggtag ggnggaatgt ngccntgnna aaattc 516

<210> 6322

<211> 598

<212> DNA

<213> Homo sapiens

<400> 6322

gagcaataaa gctgtttatt tcaccagggt gcaggcggac tgagtccaaa aagagagtca	60
gagaagggag ataggggtgg ggctgtttta caggatttgg gtgggtagtg gaaaattaca	120
gtcaaagggg gttgttctct tgcgggtagg ggtgggggtc ccaagggtgct cagtggggga	180
ggttctgagc caggagaagg aatttcacaa ggtaaatcgc tcagttaagg tggggcagaa	240
acaaatcaca atggcgcaat gtcatcagtt aaggcaggaa cgggccgttt ccacttcttt	300
tgtgattctt cacttgcttc aggccatctg gatgtataca tgcaggtcac aggggattat	360
gatggtttag cttgggctca gaggcctgac aataagcatg tagttaaggc tgtagttcta	420
ttaatgccat atttggtgta cttegcaatt cataaaaata ggttttcaat aaatttgaac	480
atacatactc acttgaaaaa agatncttgt aaaaatggct ataaaatatg ggtaatgggtg	540
gggtaatatg ggatcctgan ataattcata cctatgancc catttggttc tangttta	598

<210> 6323

<211> 594

<212> DNA

<213> Homo sapiens

<400> 6323

aattgccagg gaccactgga tgattggagt gaactccaaa gtcaaacacc tatgtctcca	60
aatcaacttt caaatggaac ctctgtggagg cctggcccac acacctccag gccgtttccc	120
cagggtgcct ggtttatgac agggtatgat atgaggcagg gctgccaggt gtctggtctg	180
ggagaggccc acctcacccc acttctcata gtaacttttag ggaaattgaa aggaaacata	240
tcaaagacca gtcctcatt tgttgagggt taggattaaa taaaacaaaa caaaaaacag	300
tagcaaaaag cattggtact atctaggtag acatctcttc taaaagatg agaataataca	360
ggtgtgtggt agataaagct cagtttccag ccagccaggg tgagctcttg atggctttgc	420
aatttgtgca aagtctgga agttccatac tcctctggct gccgggataa ttccaggttt	480
tactggcctc tggttttgcg aantggtttg gtgcatactt gngctcatna ttcttcttct	540
cctcttctct cttntttttt tttttaattc anggaaaggg aacggcnttt nttt	594

<210> 6324

<211> 566

<212> DNA

<213> Homo sapiens

<400> 6324

```

ggtgggggca catatttcct caggaaggag cagataagtt cctccttagg cttgtgaata   60
ctttcttgtc acctggccaa atggaattcc aacgatattg tgaagaggca gtgccacttc  120
acagcagaca ctcacaacaa gccacagtca tggggtggtc aaaactccca atctccattt  180
tcatgcaaag ctgaatgggc agctcagacc tttaaaaagt gtcatgaaca cataggtcct  240
cttagtctct gtctacttga caagatctct tagtgtccat gtgtgataga acagcacatg  300
cctacactgt gtggagtgag gggctgccag agccacacgg tgtagccttc tgtccccac  360
ggaggcatgg gtgagaggag agacacaaga cagagaggaa gactgccatc angcttgcg  420
aaatgagctt gagggtttat ggtttgaggn tgcaaagaaa gaagaaaaat aaggaanatg  480
gggttgggga aaaagaacaa cttggttaag ggaagangan ggatgtccng aaaaggnctt  540
aggcaccng aagggtttcc ggangg                                     566
    
```

<210> 6325

<211> 599

<212> DNA

<213> Homo sapiens

<400> 6325

```

ccaaatgcag aaaaaaagtc tttattctca taataaaaat aagtctgttc tgtattttac   60
aatatatttc aaatatttcc actatgaagc attcattagt cccacatggc caagaagtat  120
acaacctttt ccaaagacag agctgccggg agtgtgttta ggacacacac ctctacagc  180
cgcacttcac cactttctca acctcgtcca caaaggagga gccgtcagtg cattcgaaag  240
agtatttccg ccgcttgctc ctcagcggtc cacagcactg ccctcctgca caccacctc  300
tgcactctaa tcgggacacc ttcttggttg tttggcaagc agcatagccc tgctgctttt  360
    
```

ggtaataatc tcttatacctt tcccctcgac aagagatttc tcatcacag ctgtcccccg 420
 tgtatccact gctgcattca cagtagggct gcccagacc tgaaagcctg cacttcccat 480
 gcttgcactt gatcgctgg catgggttaa acagatcctc ctcttcatca cagaggacac 540
 cttcatgggc cctcaagcct tacggttgta ggagaacccc ntgatgggca accaggtgc 599

<210> 6326

<211> 585

<212> DNA

<213> Homo sapiens

<400> 6326

gtgagaaaat tacaatattt atttacacat ttacatatag cacaatgtat tggtaagta 60
 ctagtaacag gcaattaaca aactaataag aaaatcagca ttttaacaat ttaaagcgtt 120
 catgacaggg taattcatgt ccaacatata aaaaacatat ttatagataa ctttagaaag 180
 aaaatacata ctttttttga taatcacaag tagcaatgag attttctata ttattttcag 240
 tctcacttta naaatgtttt aattgnctaa attaatcaa ttcacatgatt aaaggaaaga 300
 caataaaata gtaaaattac atgtgtttat atataagtgt gtgtgtttca aataacaaaa 360
 cgcaggttgt aaactaaaat cactggaagg caaattgaag acaaaagtga tgctggttta 420
 agttgtttgg ttcttcacat aaattccagt ttccaagttg ngttttacaa ctctagtaat 480
 atccagatng ataattcaac ctgcactttt ttcttctatt cctggtttct cttggtcacc 540
 cggaattttt ggcttttact ggaactgggtt aataaaatag gactt 585

<210> 6327

<211> 593

<212> DNA

<213> Homo sapiens

<400> 6327

aaaaattgca gtgggtactt tattaagaat ttattttacc atctagccat tcaaacatc 60

tttacatcaa caaacacagc agtttgacta ttgaaatcat aagcgattta tcttgaaaag 120
 gttatatattg taggtggatg caagtatatt ggagaaatat ttctatcaaa atcactgggtt 180
 ttggttaggag tattttgatt tttctatattt tacgctggga aaaaaattaa aacaagtatg 240
 tcagtgttca ttttatggga tagttggctt cactgtgttt gtcagtgttg tccgaattac 300
 agctgtttat ctigcaactt taagattaat taaatgcaaa tgtaactctg tgaatcatgg 360
 gaatacctgc cagacctctt attaatacct tcacttaaaa cccctgtgc ctgagagtca 420
 ttaatttgct aaaagaaaag tgctaaagca gccctttgcc cacaacaat tctgcgatgg 480
 ctgccaatt aatcccaaag catctgatcc tccttcangc ctcgnggncc tttgaggcnc 540
 caggaaggct ccatgatacc cggcaaccta aggtagaacc caaccaggg tgn 593

<210> 6328

<211> 593

<212> DNA

<213> Homo sapiens

<400> 6328

ggtcttttgc tattttatag tttgcttaag aaacttaaga acaagtgact ggggccgggc 60
 gcagtggctc acccctgtaa tcccagcact ttgggaggcc gaggggggtg gatcacgagg 120
 tcaggagatc aaaaccatcc tggctaacac ggtgaaacct tgtatctact aaaaatacaa 180
 aaaattagcc aggtgtggtg gcgggtgcct gtagtcccag ctactcgga ggctgaggca 240
 ggagaatggc gtgaaccggg gaggcggagc ttgcagttag cgcagaccgc gccactgcac 300
 tccagcctgg gcgacagagc gagactccat ctcaaaaaac gcgtacagca aaaaagggtg 360
 ccgttacata ggtcattgga tgctatcact ggaatgtctg ttgagaaata aacgttttac 420
 catctgtaga cacatgaggg cgctttaagc aggcagcgtg ggatgcancg tncnaagga 480
 aggaaggagg aagaaagctt tgtcaaaagn agcctgaaat tcagcctntt cctatctggt 540
 tgcgacctgt gcctgcntcg ggtggggggc acccaatcaa ttaagaaaaa aat 593

<210> 6329

<211> 584

<212> DNA

<213> Homo sapiens

<400> 6329

```

gagatgccag gctggagtgt agtggcacia tcatagccca ctgcagcctg gaacacctgg 60
gctcaaggga tcttctgcc tcagcctcct gagtagctgg gattacaggc acgtgctacc 120
acacctggct aatcttttaa tttttggaca cggttttgct gtattgcca agacggtctt 180
gaactcttgg cttcaagtga tccccttgcc ttggcttccc aaagtgtggg attacaggtg 240
tgagccactg cacctggccc gacttcacct ccgacctact gctggggccc ctggtttggc 300
ctctccagct ttcctgcgt ctcacacagg ccctgtgccc tccgcatttc acccctcccg 360
gggagtctgc tgccgtcaac tcacagcctg gcaaaggggc cacaacactg cactgtgggt 420
tgaggtgcat gggcccatgc tacacggccc aactcaggag taggacaagg tgtggcagcc 480
atgcccttgc ctctacaga caaagagtga ccacccacc caatttcctg gcacacgctt 540
ccaagtgaca nggtgcttnt tttaaaaggc agnccctttt tgcc 584

```

<210> 6330

<211> 594

<212> DNA

<213> Homo sapiens

<400> 6330

```

gacagccaaa atatttatta ttggttaata taccacttaa aatctctgac ctaaaacaaa 60
tttttgagcc actggaaaag tgaactttct cacagaaata tttaatgttg tcaaaagaat 120
actctgtttt aacaataact ccattaattt attactttta aagatgcaca gtgctgcttt 180
tacacattaa aatttcagtg acatcaacaa cataactata tgtaaatatt ttgaactaac 240
atttcaaatg tagactgacc acatgtttga tttaaagctt aaagaatcaa tgttcccttt 300
tgtgaagatg gcttttgttg tcattagatt ctactgattt tttaggaata gagctgctcc 360
acactgaatc cactggcttt gggtgcccc acatggaaca tcaatattgg taaccacacg 420
atccctttca gcacttgtgt aaacaggcaa agagatgcac tcatccggag aatatggacc 480

```

acgtgcatcc tgtggaatcc agcccataaa acaagggaca ctgatgaccc ctgggagaat 540
caagcttgat ttcanaaagt ggattncatc aaactacatc ctttagtacc aagc 594

<210> 6331

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6331

aagacagggt cttgctatgt tgcccaggct ggcctcagac tccttcctc aggggatcct 60
ctcatctcag tcttacttgt agctaggatt acaggcatgt gccaccaagc ctggctaaga 120
gtttaaagtt ctgacaagcc acttttgcca tcaacatcac tattattatt gccattattc 180
ttaaattaga aatattttta tcctttttac tgctattact ctgatgatat gccaaaggtc 240
atgctcctca attctgcctt attttcacct tttctctatt tggtttttca taatcattat 300
taaaccagct taacaaagtt gttctattta atccaatc tactggctga acaactcaaa 360
atttcagggtg gcaaagaaac tggagattaa ccaattgcca ttgccaaatt attgtaacag 420
catggaaacc tgggtgttcc agacagtaag ggctccagag gttatctgag aagcccggaa 480
atttaaatat gcatttcttt ganacccttg gtaccccacc ctactttaat ggtaaaagaa 540
gtcnttacac catcttagga ccctgagggg ctaaaccctg gaaggctaan n 591

<210> 6332

<211> 590

<212> DNA

<213> Homo sapiens

<400> 6332

aaaaatacag tggttatccc tctatggttt ggaagtattt acttttggga ttctcatgta 60
tgatcatttc aaattttata cttattcata ctgatttcac gtttgagaaa atttatggtt 120
caaattgtaa tgtttacaaa tctcaacttt taatcatggc aaagtggaca ttcacaacag 180

cttcagaaga gaaaagaaaa tcagtgatat aacaaacatt taagtatcat ttacggcagc 240
 cctataagaa ggctagccat aattccctat ttcattctga aagtgatatc ctattagctt 300
 tcattccata agcctaggag aaaagtataa aacctaaaat tacctatgtc ttaaacaata 360
 ttacacctaa aaagatgatt gtcgtagtag acagactgga attgtccacc aaaataggaa 420
 attgataccc aatttatagt ctatgatgaa atttaggctt gaataagtgg agttggagtt 480
 ttaatataat gnacttcaaa ctattaaaaa aaccgggtct atggncagg tgtttaaaca 540
 tggccctggg taaagaanct gataacctnta aaaagaattt ttttaggccg 590

<210> 6333

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6333

atTTTTgctc atggaaatga gaaatcccat agcaataaag aagctaatac cccactaaa 60
 ataaaccaga aagtctctcc cgtcttttatt cctcttaagc cctttgttta gtctatagat 120
 aaggatctaa actttttaag ttttaaaatt taaaaatcac ctgctttaat tgccgtaatt 180
 caaagtcaga agaacaaga agaattctga tccaagaagc tccaattatt gaaagctcag 240
 gtggtggaaa caacatgtaa ttcagggggc tcagagaagt gacaagcggg agcctgaaaa 300
 cacacctttg accggcaaag tgagcagagc tcagtagagg ggaaatagca cagcacggat 360
 cctccccagg aagagcccat gctacgaaaa gaacatctag cagcaaatca aagaaagggg 420
 cttctttcct gctttagggc tatcacagcc caattctatg tggaaaatcc cttgctcttc 480
 ctctaattct cggctncatg gtctgacatc tatttccttt atcttctctg gcagnctatt 540
 antaaatcct gggccggccc cgggggttac gcctgnaatc cagcantttg g 591

<210> 6334

<211> 540

<212> DNA

<213> Homo sapiens

<400> 6334

```
cagcccagcc cttggggccc ctttattgaa acaactcaca gcacagtatt tgagacagac 60
agtgttggcc ggcggaaccc caggaggctg agaagtcgag gttgcggcat ccctcactgc 120
cctcctgggg gaggcattcct ccaagcagac ctgagcggcc ccgggctggg gcgggcatc 180
cacacacaga ggcgataaga gcacttggaa tcagggcagc catgcagcac tgccctaggc 240
ggggatcccc caaagtctga cagtttgggc atcagtgggg tggcaggtgc cccctcagct 300
gcctttatga gcgcgctctt ccacgtaaag ctgcatcttt aaaatgtccg acgtcatggt 360
ttttagtggc atcagcccgg gggtcattgca tgtggacatc ctgctcatcc gccaggatcc 420
aggggaaatc cttgatgacc tggatctttt ccatgttgcn agtggcggnt tntntcgtgt 480
gcaccaagaa ttgtgaaggt ncaacctggg ggggttgnng tccaagacgg gattgnacac 540
```

<210> 6335

<211> 553

<212> DNA

<213> Homo sapiens

<400> 6335

```
gagacagggt ctgcctctgt tgcctaggct ggaatgcagt ggtgcagtct ccactcactg 60
caacctccac ctccctgggt caagcagtc tcccacttcg gcctcctgag taactgggac 120
tacaggcaca tgccaccatg ccagctaat ggctaatttt ttgtatattt ttgtagagac 180
agggtcttac catgtttccc aggctggtct tgaactcctg gactcaagt atctaccac 240
ctcagcctcc taaagtgtg ggattacagg catgaaccac tgcacctgcc caaatgacct 300
cattttaact tgattacctc tgtaaagacg ctatttccaa ataaggncac attcacctgt 360
acaggggtta ggacttgaat atcttttgtt gggggacaca atccaatcca ttaccaatac 420
cttcccccaa acctntcagg tgctcaaagc ctggatcccc aagttctgct gcctnctnac 480
atgtggcttt natctgtttc cagccgactn ttggctggcc atgggnaaag tccaaccaag 540
anttaagata ncc 553
```

<210> 6336

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6336

```

aaaggcaaaa aagtaacttt attgactgct aatcttacca tgaaatatct ataanaaata   60
attacaaaat aatgcaggtt tctttttaca tactttnggt atcatcttga tatgatgac   120
ctttcacana aaggattatt tacagtttat gtagatataa agctcactgt tgcatataca   180
aatgtanatg tgcanaggca atatatacca aaacgggtat actgacaagc gatagatatg   240
taanaaatgc anaataaata acagctttat atatttcctt tcctttttat ttttaaaaac   300
aatttccaaa tacaaaacat ggattattca aagnggattt ttcctataca tatatataat   360
tctgctgcaa acagnggatc aaaaagcaga agtgttctta gcatgattca tctttgaaaa   420
cccatagaac tattcataaa tccaattagt tctattaaac atattaactg nattgggttaa   480
cttatcangt ttttgacata gagaaatttg gttgcaggtt atagaaantt tatectccan   540
tttcaataat tncceccata attcnggggtt aaggn                               575

```

<210> 6337

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6337

```

aagataagac cataagctag agttctggtc aaattataat gcctttcctc cgcctttctt   60
tcaaatecca aatgtccaag gaccaagttc ctacttcaact cataactaact tttctaaagt   120
ctctagacct acgttcccca acatggtaag catcagccac atatggctaa atttaaata   180
attaaaatta aataaagtta aaaacacagt ttcttagcca cattaaccac atttcagatg   240
ctcggcagcc acataggacc acgtgtactc tacaggacag cgcagacatt tccatcttcc   300
actgcagaca gttctaccgg acagtgtctg tctggactca ttiggttttg ctttttttaa   360

```

attgcatttt cagacatttt tataactttt tgaaatgtta aatgactgct ccacagagtt 420
 attcatttga tggtcacacc tactcaatcc cagaaccaag catttttagtg taattgcaga 480
 aatgctctga accaatcaac ctattggcct atttgggcaa attaggaaga aaaaaactat 540
 nagccgnttc aaggaccttg gctnaattct ggttacatac agtccca 587

<210> 6338

<211> 593

<212> DNA

<213> Homo sapiens

<400> 6338

accctgggaa gcattatttt ttaatgtacc aaaaatgtct ttgtacatct ctgtattaga 60
 tgcttttata aacaacgtgc attatgagaa aaaaatgaaa atttcccatt tttattttaa 120
 aaaggtacag agaatagagt ccaaatagaag tctccaaatg acaatatgcc agagaacacc 180
 aaattcccaa atctgagtaa ctatctaaat ttctgaggtc tcagcctgga caacatggca 240
 aaaccccatc tctacaaaaa acagaaaaat tagctgagtg cgggtggtgtg cacctggagt 300
 cccagctact cagaaggctg aggtgggaga atcgcttgag cctgggaggt tgaggctgtt 360
 gaggtacag tgagccaaga tcgcaccaat gcactgcagc ctggaggaca gagcaagacc 420
 gtctcaaaaa aacaagaaat tctgagggtca gcaattaaat atttgctttt aactttctac 480
 taaagtacaa aagaaaaata acacaatttc tatgaaatat caggataagc atagcaataa 540
 atctggctta atgnaaatgt agccattttc acatatatta ctggggaatg gcg 593

<210> 6339

<211> 579

<212> DNA

<213> Homo sapiens

<400> 6339

aacacctcaa actcccctca gcccataat cctggcatct ttagtgagtc aggacaatcc 60

taacctagaa gcatatatgc ctgggagctt cctggcctca aaggaataaa tcttttcaca 120
 gcattcacag gactgaaaaa taatataaat aggattccta cagtaaaca gtattgtttc 180
 tgtttcaaaa ccatectgca agcataaca tcagctggtc ctaaagcctg taatacgtac 240
 acaggtcaca ggcagacagg caggcaggaa aagggtttc cccagtgca ggctcctttg 300
 gttctgcctc agaggcacta gaagtctagg ccctgggtta acagcaacc agagtctgct 360
 tggatatggg tctagttgta tgcttcgtaa gtgaacacca aaataccata aaggtagagg 420
 agagtgaaca cataaccac ttgcaaataa gaattacctt gcaagattcc tttttttta 480
 tcttaacagt ctatgcgtat gaacatttta ttctataata taacttttta tataaaaata 540
 ggncatctta tgactcttaa ccattgggaa gtaaactgg 579

<210> 6340

<211> 586

<212> DNA

<213> Homo sapiens

<400> 6340

gagacaatgt ctggttctat tgcccaggct ggagtgcagt gtcacgatct tggctcactg 60
 caacctccaa ctctgggct caagcaatcc tcccacctca gcctcacgag tagccgggac 120
 tacaggcatg taccaccata cctggctaata tttttttttt tttgtatttt ttgtagagat 180
 ggagttttgc taagttgtcc aggctggctt tgaacacatg aactcaagca atctgccac 240
 cctgggtctcc caaagtgttg ggattacatg tgtgagccac cgcttctggt ctattattgc 300
 tattatatgt aagctcatca tataatgcag aataatttgc taaactgaag agttactctt 360
 aacatgaggg cccatgaaag gtagcataga ataatggtta ggagacagta agctatacag 420
 caaggctgcc tggggctctg ccacttacca gctctgtaac cttgggcaag ttacttatct 480
 ttttccctac ctactttctt tatctngaa atgganaaaa gtaagtagtn ccaggttgag 540
 tatcccttat ccaaangat tggganccaa aanggttta aantta 586

<210> 6341

<211> 596

<212> DNA

<213> Homo sapiens

<400> 6341

```

aactttttaa atcagaagta ggttttatat ctttattcag aggtgattca actatagaat 60
aaagcccttt tagcactata aaatccaatg ttttgaattt tttttttttt tgctcagcaa 120
tacagttgca ttttacaact tttataatcc tgaagagatt ctcttatttg gagttttttc 180
atgcattcag gtatttagca tgatgtctga tgtggtcagt aataaagggt gcaatgaagt 240
agtagctatg atcataaccc tagaagataa agagatgata agacatttat ctaccattca 300
ggaacatcag tattaggaac attaaatata tctctaaggt cgtttaattt gcttacaat 360
agtcataaca ttaaggaagt atgaggaagg tttataataa aatcaagggt gtcaccttg 420
tactttaaca ttttactgt cattaaaaga gcagcaaaaa tgtgaaggaa aactaaacat 480
tctgcctagc ttctaaacat agcctaactt cttaaagctgg cattaatatg taaagagtgg 540
aagtancnca ttaattaaat atgcccagat anactggcat atcaccttgg ggaggg 596

```

<210> 6342

<211> 594

<212> DNA

<213> Homo sapiens

<400> 6342

```

gagatgcagt cttgctctgt ccccagggt ggagtgcagt ggcacaatct tggtcactg 60
caacctccac cgcccgggtt ccagcgggtt tcctgactca gcctcctgag tagctgggat 120
cacaagcgtg cgccatgttc ggctaatttt tgtattttta gtagagatgg ggtttcacca 180
tgttggtcag gctgatcttg aactcctgac caccaggat ccactgcct cggcctccca 240
aactgctgga attacaggcg tgagccaccg cgcccagcct aaaacgagat ttctatctcg 300
tttttcaaac ttataccaca aaattgccga gaaaatccca aaaaaggaaa caaacctag 360
aacaatagaa agtaagtctc aacccaattc caggccaaat caatattaat gagcttcttc 420
atacaatcct cttaatgatg agaagtttac aagangtgga gaaaaataac cggggttaga 480

```

agcagtattc attggtttta agctgaagnt aaaacttntt nattcttttt cgatggtaca 540
taaatactntg gaaaaattaa tccaggccnt tttccaacct ttttttggaa angg 594

<210> 6343

<211> 585

<212> DNA

<213> Homo sapiens

<400> 6343

gttttctttt cttttctttc tctctctctc gtttctctcc tctctttttc tctctctttc 60
gcaataaaga caggaaaaag gcgggggggaa acatggagaa agcttcccac ggataatccc 120
atggagtcta aaaggacat gccgagggct ggcagggctg ggaggccttt gggaagctca 180
gaggagccgc ggggagccgg gcgtacgaga gcaggccggg actccgctgg gcgaggccga 240
gcagggacac cagctcctca cccagttgaa acttgcggtc actggagagg agcaacgcag 300
gagctgatct ggtttgaaaa agaggtcaaa gcactttaca gctcccatTT cccagcgccg 360
aggagtgggtg agttttccgt gttccaagcc ccaactgttct gcctccggga gagtttgcag 420
ctgctttcgg ggaaggtggc tggctctgct cacctgctct gccctccctg acaagagcac 480
ctgctgtgtg cccacacttt ggntcccgag gtctactttg ctctnctgc accccaggag 540
cttgccctt ctggctctgg aggagactta ggttcagnaa actgc 585

<210> 6344

<211> 501

<212> DNA

<213> Homo sapiens

<400> 6344

ggtttttgtt gttcaaattt ccctttttaca gtaaaactac tgaggtgacg gcataccccg 60
ccaccatggc aatatcaact tctgtttccc cagaaggagc gattagaaaa atcaggaagg 120
agctgggaac tacagacca gagaggtgaa cttgacctt ggtggacaaa gcaaccatct 180

tggctggtga ttgaggtggc caacctggtg cccaacaaca gctttgatct aataaaactg 240
 tgttgagtct gaaaggagtc ggaaatgtag gatggaatga acaagacagc catctgggtt 300
 actcgggaga gcacatgggt tcttggggta gtcctgttga ttaacagaga ttatactggg 360
 atatggaaag gaaagaacaa gacaaattan gcctgccaca gcacatggca agtcatttta 420
 nctgcctaaa atcagcacag agcacaangg gaaggagatc ntgggnaagt gncacttgaa 480
 actgggnaaa agnccttttg g 501

<210> 6345

<211> 602

<212> DNA

<213> Homo sapiens

<400> 6345

atgccactta ttttatttac taaccttgac aggactaaa gaatgaggta cagaaaactt 60
 tccagaagtc tgagtgtggt gtagaagtc aagacaactt ggagctccat tattgcatta 120
 ttaagtagaa tgaactgtta tgaaattctc catattccag gtttactaca tagaaaagta 180
 ctatttacct acctcacaga ggtattgtga ggatttgtgt ttataaagtg cttcaggcgc 240
 cttcgaagaa aggcaacata caagtataaa ataatacat aaatttcaa ataatgaaa 300
 agatgatattt ggcacaatgg gaagggtgcc tcctatttaa agaacacttg gctattggtt 360
 tataaaatcc cctgacctct tgggttttaa aaaaattatt atttaaaaga ataatgttt 420
 ttccattgcc aatcttataa aaattctcaa tccagctggg gttatcagaa tccttggaag 480
 agctcagtaa aattattgat gtttgggcaa cagnctacac cagcggaatt aaaggtctat 540
 gngggatacc caggtnctta tatttcaaaa ggactnttgg gaatctggnn cctnccaaag 600
 tt 602

<210> 6346

<211> 603

<212> DNA

<213> Homo sapiens

<400> 6346

```

gtttgttcat ggagggaagt aaggaaattt taatgatatt ccttagataa tacattttct 60
tacctaaaag tggtaacaata atgggtttta ctctacctca gtccactatg cagcatgcat 120
actctactta atactagggt gtgttcctac agttagttaa aaaaccaacc agctggtagt 180
atTTTTTTtag atccaaccta agaaagacag tgtggtctag tntagagggc actggctttg 240
gagtcagatg ggtctaagtt cgaatgctgg ctctgctgct tggaagggtg gtaactttag 300
gtaagttgca taacttctct aagcctcagt ctccgtcacc ataaaatggg gatattctatg 360
tatcttgcag agctgatata cggttatgcg ttacatgtgt catacagagg caaagtacat 420
gtcgaaagta gatgtggcct gtgaataaag tggtanggcc aattttacac cgatgggtaa 480
gctcacaatt aggaaacatg aataacttct ttggagtaa tatatatnta taatggaagg 540
tcagagttaa aataanggat tcccttcaat catggttctt taanggggtc atcatggacc 600
cat 603

```

<210> 6347

<211> 590

<212> DNA

<213> Homo sapiens

<400> 6347

```

gagatggagt ttcgctgttg ttgccagggc tggagtgcaa tggtgcaatc tcagctcatc 60
gcaacctctg cctcccaggt tcaagcgatt ctctgcctc agcctcccga gtagctggga 120
ttacaggcat gtgccaccac atccagctaa ctttgtattt tgagtagaga tggggtttct 180
ccatgtttgt caggctggtc tcgaactcca gaactcagat gatcctcccc cttggcctcc 240
caaagtgtg ggattgcagg gtgcagccac catgcccggc ctctctgtc acttttatag 300
ccatctctg ctgagaggaa agagctgaca cctctctgcc cagtctcgag gccccagtcc 360
acactgtcta caactatcta cagccatctt cataccta at gccaaaagag gctccccaca 420
ttagttaacc ctgagagtga ttactctaa atttggccga gcacactaga gacaaagaaa 480
cacaaacca cccagaaata aagtttcang gccatcctc cttttccacc aagtaaccac 540

```


cntgnaggaa acttnttttc cttggcctaa nccttttacc agttcacacn 590

<210> 6348

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6348

cttttatttc atggatctgt ttattccatt tattagtaac agtgcatttt ttcacacagt 60
attctatttt acttaaacctt aatgcatatg tagtaagaaa gatttactat cccaactagc 120
ctctcagtat ttagatgagg atagaacaga tacggngtaa cacgcctctc cactgcttac 180
tgtgtgtacc aagaaggcag aaagcagctc acccaagcct aacctggccc tgtctttttc 240
aggctttctca ggatgcccac agcacatact ggggggatgg ggacactatg gtgcactcag 300
gcagtggcaa gggggcaata cgtggagtca ggatggagga aactgggtg ccaagacagg 360
aggggggcct tggcaaccat ctgcaatgca tggggcaggg actatctgga aggactgcag 420
ggatcactga aaagctgtgc caatgcatta gccatgaaac ctaagaaact tcagacatgt 480
ctcctctggt taccaagagt tgcattatct tggggacttt ttgatttcag gccattcgga 540
attatggcag ccattgntcn naggataanc tttggnnaca aaa 583

<210> 6349

<211> 594

<212> DNA

<213> Homo sapiens

<400> 6349

ctaaaatctt gcactgtgaa cagcactctt tgtaacttgg aaactcagga gcctttggaa 60
agtactgctg cagtttgctc caagcctctt tagaaacaag ccttctttca ttttcagata 120
tgcataactc accatgtgga cacagaatat cttcattaaa atttaatccc tcctcttctt 180
ttctttcttc ctttgattca tctttattta aggtgctacc gttcatcttt ccgttgcttt 240

gttctgcatc accatcttgc tcatccagct gttcaagagc tagctggcgc caactccgca 300
 aggaggactt cccacccaa aatccatgc cctttactgc tgctttcagc agattattaa 360
 cagttttata atcttcattt aagttgggtc ttcagacgca atatgcgaca acgttctact 420
 acacattcct tacacanggg cttttacagt tagccttgga cctcctccat attactatag 480
 gaaangcaac tggatatcag aaatcctctt cataatggaa atttaatccg ggngaaactt 540
 ggcatitggga cncaggcaa ccgggatatc aaaaggttng gaaggggggg atca 594

<210> 6350

<211> 190

<212> DNA

<213> Homo sapiens

<400> 6350

gttttgaaca gcaatgagat ttatTTTTTc agcttttatt ttaggttcag ggtacatgtg 60
 caggtttggt ataaaggtaa acttgtgtca caggggttgg ttatacagat tatttcttca 120
 cccaggtact aagcctagta tccaatatta tttttctga tcctctccct cctcccaccc 180
 tgtgcaccct 190

<210> 6351

<211> 525

<212> DNA

<213> Homo sapiens

<400> 6351

gagacagagt tttgcccttg ttgcccaggc tggagtgcaa tggcgcgacc ttggctcacc 60
 acaacctccg cctcccaggt tcaagcaatt ctctgcctc agcctcctga gtagctggga 120
 ttacaggcat gcaccacat gcccggttaa ttttgtattt ttagtagana tggggtttct 180
 ccatattgag gctggtctcg aactcctgac ctgaggngat ccacccacct cggcctccca 240
 aagtgtggg attacaggcg tgagccaccg tgcccagcct taaccttaca tttctaaagc 300

actaagaagt ttctagattt gagttaacac tattatctct tgaagctcat ataccctacg 360
 aggtagacaa tgcagataga tacagngatt ctcatccac acgtgaagaa actgattttc 420
 agagactaat ttgcccagg gncacacaac aaattaagg anaagccaaa cttggacca 480
 tgnntttcaa gggncaggtt aanacntttt aacctggcct tttgg 525

<210> 6352

<211> 559

<212> DNA

<213> Homo sapiens

<400> 6352

agagtgtcac tgatgcttta tttacatgcg tcaccatctc ttttacaac tagattacgg 60
 ttttaagtgg aatacacaag gcaatatcta caaacaccaa ggaaagttaa gtactgcac 120
 tctatttcat ttggaaagg gaagattccc aaatcaaact ggttttgatc cttagaaag 180
 gcggcagagt taattcatgg caacatatgg ttagacaaaa tcctcagtaa gaatgccata 240
 tgatagtgtt cgcattgaaa gaaggatgag gtgcttcaaa tcaaagtctc aactgcttga 300
 ctctcagggtg tttaaatatg gccacacacc atatttagtt ctagattata tgggatatga 360
 gcaaggaatt gaaacagata agatagtttt tacagatact gtatacagat tttttttcc 420
 attcatgcaa cttttttctt aaaaaaggtt aaacatgtga agcccaaatg cccaatacat 480
 ttttttaaatt attactaaa tttctgggg cctccttaca attggtacct tttccctngc 540
 cataangggc tgggacaag 559

<210> 6353

<211> 535

<212> DNA

<213> Homo sapiens

<400> 6353

gagacaaggt cttgctctgt caccaggcg ctggagtga gcggcaagat catggctcac 60

tgcagcctca acctcccagg ctcaggtgat cctttcacct cagcctcctg agtagctgga 120
 aaaacagaca tgtaccacca tgccctggcta atttttgtat gttttgtaga gatgggagtg 180
 tcaccatgtt gccaggtg gtcttgaact cctgggctca agcaatccat ccgcctcagc 240
 ctaaactctg atctctgcca atagagccaa acgtttttta aaaggcaaaa atctctctat 300
 aggtaaaagt tttatttcaa tgataatatt ctcaaacatt tcttaagaaa tgtcttcatt 360
 ttctaagaaa tccaattact gncatatact tccaggattc tccaattttt tttttcagga 420
 tattatagc catcaatttc catacgactc ccacacagt gtggnacca aggtggnttg 480
 gggacntgna agaaacctta gncccaatt aaaagttggg cgggacangc agnca 535

<210> 6354

<211> 558

<212> DNA

<213> Homo sapiens

<400> 6354

gcaaatcatc agcgctcatg tttatttata aagttacatc ctaaaagtga ttcgaacaat 60
 aaatagttat aaagaagatc tgctgcccta ccctctgggt gtgaggcctg gctgtgaatg 120
 gatggcctgt caatcctggt tgcgatggc actgtgaagg cccctctgt gtccggcagg 180
 taggtggagg gcacaacctt gtagggccc caggcaggag gcagagccgg ctcacctcct 240
 gggcgtagcg atgtggcacg cagctcagca gcggctcctg cagcagcagt gggggtgcgt 300
 cctggctcct tccacctctt gggacctgga agatatggaa gccgatgggg tggaactcgg 360
 tgtcactggg ccggcagtg tgatgcagag tgatgcggac gcagcgagct gcacggtccc 420
 ccactccccg caagcagggc ttgccccggg ggtggtgttc tttggncact ggccttatgg 480
 cgcttaagga aactngnccg gtagaaaaag acttgagca nggacttccc ctggngcgtt 540
 ccttaaggaa gggcttgg 558

<210> 6355

<211> 534

<212> DNA

<213> Homo sapiens

<400> 6355

```

gcaattacaa acattttaat aaaatggaat gagcttttta attgaagcta atatgaagtc 60
taatttcat ggacagcaaa aaaaaaaaaa aaaaaaaaag tctattagat caattatcac 120
cttacctttt tgcacagaaa tcttattgng aagtcacat agagtcaata gctaaaattt 180
taagactttc tttggccttc tgatattaaa caaattattt acaaactgng atcagtaatt 240
cgnggatatt ggtaaaatga tncaattttt tgttgttgtt gttaagggtt ttccattaaa 300
aattgtaaaa caactttgta aggctgtaca gggctgtaaa ctactttgct aatataccat 360
gggatgcaga ggaaggaata atagaccttt tttttaaggc taaagttatc aatgttatag 420
atgcattcct taaaatcatt atgatttata cccaaaggga cctttnccat taaatcccct 480
gggtnttaca antttcaaag nnaaaaaatt aacctggatt ncccttagtn tttt 534

```

<210> 6356

<211> 550

<212> DNA

<213> Homo sapiens

<400> 6356

```

cagtttgaaa tgttttcccc ctttattttg tttttcaaat tacaaaagca atatatgtga 60
acaagacaat gcaaaggtat tcagaaaact tattaccctt ctccaccaag gtaaccaatg 120
aatgttaaca ccttcgtgtg tattcttcta cacttttcta tgttcatata aacatccaca 180
tgcatatata cacacacagg agtttttact ttttttaaaa atagaatcgt atacattatt 240
atgaaatttt ccctttttac aatatatacc atgaacatcc ccacaaatta gcaaaattct 300
agctccctca tccccagcca aatttactaa ctacacatt tgtggtatca cccgtgattc 360
agtcatttat gtatttttct ttttttggtt ttccttttcc ctacaccct gactccccca 420
taacctacct gcattacca ccttccttca agtcaatgca tactcttcta tacttttctt 480
catgcnnttt aaatccaatt aacctttttg ggancctgggt antggtggac aaacccttag 540
agncttttgg 550

```

<210> 6357

<211> 551

<212> DNA

<213> Homo sapiens

<400> 6357

```
gagatggagt ttcgctcttg tcacccaggc tggagtgcag tgatgtgac tcggctcact 60
gcagcctccg tctctcccag gctcaagcaa ttctcctgcc tcagctttcc aagtagctgg 120
gattacagcc tgcaccacca caccagttg tttttttgt attttttgta gagacagggt 180
ttcaccatgt tggccaggct ggtctcaaac tcctgacctc aggtgatccg cccgcttcgg 240
cctcccaaag ttctgggatt acaggtgtta accaccatac ctgacctctt aatctctttt 300
ttgaatagtt tgttgtagt gtatagacag aaaactgatt tttgtatgtt gatttttgta 360
tcccagaact tgactaagtg aacagatttc ttgatgaagt cttgggtttt tctacataca 420
agattatgcc actgnaaata aagataattt tatttcttct ttatgaatta agnggctttt 480
actttttttt tttttttgg gacaanntg gcctggttgc caagctggaa tggcaagggg 540
caatttaant t 551
```

<210> 6358

<211> 556

<212> DNA

<213> Homo sapiens

<400> 6358

```
catgttctca actttattcc ccatcccagt ggtggctctt ctgtacagt gagaaagaag 60
ggggacccca ccagggtat ggagagacag tagaggcagg actgaaccgt cagcaaagat 120
taaaaggatg acctgaggct ggcaaccaca aaaccaagaa gccagcgggg gctgcccctt 180
ccaagtctca ccaatgacct agagcagggt ccagagccca aaggcccaaa agtgcaattc 240
ccaaaagcca aggtctggga gccatcaagg agtcccaga gatccagcga cgctcagagg 300
```

gcaagggtgt ctttcatgag cctgcgcattg gtgggtggtga ctgagggtgcc cagggcatca 360
 gtgatctgga aggagatctt gtacaggtag ggctgcacgt cccgcaagcc tgtgtcaaac 420
 acgttatcca ccttcgactg tgtgggcatn ttgggcaaag tctnatgccg attcattaac 480
 ttcacgatgt tgatgancnt ttgcaaaaag tttttaccac nttttcccgg naaatttgcc 540
 gttcttgttc cggggc 556

<210> 6359

<211> 538

<212> DNA

<213> Homo sapiens

<400> 6359

gagacagggt cttgctctgn caccagggt ggagtgtagn ggtggagatc acaggcttac 60
 tgcagcctca acctcctggg ctccgnggt cctccacct tccacctcct gagtagctgg 120
 gaccacaggc atgtgacacc agctaattta tttgtatatt ttttaagaga tgaggctctca 180
 ccgngttgcc caggatggtc tcaaaactcct tgggctcaag cgatcttccc gccttggcct 240
 gccaaagngc tgaaattaca ggcatgagcc actgngccta gcctaggaaa tttcaaatta 300
 tatatgngng tcacgttctg nttctcttgg acagtgtga tctagaagaa gaactgttac 360
 taagagttag ttaatggtac ttgggaatag ctttatgatt caaatcattt ccttgnaaat 420
 ggtcaaaaat tgtaaggga ttttattaaa taaatggntt tcnggatttc aaaaatgggt 480
 naaggggaaa aaaccttnaa aaggganaaa ggctttttna aggcntgggt ttagcttt 538

<210> 6360

<211> 555

<212> DNA

<213> Homo sapiens

<400> 6360

aaactaacgt ttatttaaca acctacctgt atgggccagg catttatgct gaggaaggac 60

aaaggagatg aagcatgctc cttaccttgg gaaacttaaa gtgtagtcag gaggagaaac 120
 agaatatatgc aggttgaaaa tacaggaagt caaaaaatta acaagagtaa ataggaaaac 180
 tgggtctaaca gttcacatat tgtactggaa aaaagagagc acagatgcag aaagagtaat 240
 taggtgaaat gaacctgtta tcttatttgg aaaaatgagt ctctgaagat gtaattaagt 300
 taaaggctctc aggatgagat gacactggat tatccaggta gatcccaaata ccaatgacaa 360
 gtgtccttac agaaaataca cagagtgagg tcagagagat gagaaggcca tgtaaagaca 420
 caggaaaaaa ctggagttat gcagccacca gacaaggaat gcctgtagcc cccaagctt 480
 gaagnaacct tggacaaaaa tttccttna agccttggga gggaccacgg tttgattttg 540
 aaataggatg cntac 555

<210> 6361

<211> 549

<212> DNA

<213> Homo sapiens

<400> 6361

attcacagca tacttttatt taccaaagta catcgtagat tatacaaata ttaattacat 60
 ttacattata catttataat attaaaattg tgcgagtagt cttcaaata ctgacaactt 120
 tgggggtcagt gaattattta agaaaaaact cagaagagtt ttgaaaaagg agcaggtgta 180
 attctacaaa ttcaatatga ggcaccagtg ggagaagtca attggatgag cacatgaaat 240
 attaggagtg ctcgtgaggg ggaagtaaca ggtctattgt gtgcagtgtt gggcaggctg 300
 catatggaga atgtgttaaa agagcatttg caaacttaag cattacttga agatattaaa 360
 cagaatgatg gaagcctggt ctttgattat ttattgctga catatgcatt gcantgatgg 420
 cattnatggc ctaangatta agcttacnnt gaattggcca tggacaaggc atgcttataa 480
 ataaaaatgc ctgttggtga ttgcccattt tgggaacctt gctagctcaa atcttctntn 540
 angcccatt 549

<210> 6362

<211> 551

<212> DNA

<213> Homo sapiens

<400> 6362

```

ggttcctacc tctttaacag aaaacaacaa tgcacttgag aaaaagtgat tctttgggaa 60
gaccttcgga agcagcatga cagtgaacaa aatgagctca gatggacgtc ctgcactgac 120
actgaatgct agagagtcag tcatttcact tgcctgaacc tcctcgtccc cttgtccaga 180
gtgagagacg tgatgttcac atcacaggct tgctgtgagg gccagtgagg aggcaaaagg 240
gataatgcca cacaaagacc aggtgctcaa taagggtgc tgttattact gaagtcttgg 300
gctcagttcc agctgtccta ttgcttaagt ctgtgagctg agacaagtcg tgtcaacttt 360
tgggccctct agaacacctg gatagtcttt ggtgggtacc accttgaaaa aggcttgggg 420
gtccactgta ccnttancaa ggggtcactt acttttccaa attcacttac tcttatatca 480
gaatctactg gatcgtaaaa ttctttcant anangggcct atanccttggc acatttttaa 540
anccttgat n 551

```

<210> 6363

<211> 551

<212> DNA

<213> Homo sapiens

<400> 6363

```

aatttagttc ctggtcaaac aaattcaagg cctactttag cctgcaaggt cactagctta 60
agacttctga cctttgccaa taacaagcct gaggccttca tatgagggtt ggcaagttta 120
gggtgggacg ttaaaagaga caactgcccc gggaacagta gtttaccat taaaagtaat 180
agggtaatgg gcaggcaggt taacagtgcg tataaaaatg tttaaacagc gactgaggca 240
gcacaagtta acctgggaca agaagcatgt ttacttgatt tgaattatag aactatgtat 300
ggctccttaa actccccctt agtaggggct gcattggagg ggaggggtca agaggtctca 360
ttcctgaaaa ctgaaaggac aaactgcata aagnccaagt tgnctaagac agatgccatc 420
tttacatgat ataattcaag tttaagcctt ttaggaaata atncattngg tnaatattga 480

```

cttttacaat acttgataa ttctattcnc aacccccaaa gagccattgt agccaaaacc 540
ttaatggacc t 551

<210> 6364

<211> 446

<212> DNA

<213> Homo sapiens

<400> 6364

gcctcggggt tacnagtcgg ctgctatagc tttcagaatc acactcacac taccacattc 60
aaacgcagga aatgtgagtg gcagcaaaaa gaggtttct tcacagaact gntccccatt 120
ctgatcaaaa aagaaaatct ttccaagaac cctnccccag gagactttct ttgattggcc 180
agaaccaatg agatgagacc agtctatgcc agtcaactggg attactaaag aattatcatg 240
aaaggnntaa gccaatgnta atacctcccc taagtgcatt ggtgcttact caatatctga 300
acaaaattac ggntcttgag catgaaagaa gcaggcacag ggaagactnt caagttaggt 360
aaccagtaat gcctggctta cttggccaca gancncaaag gcgattcttg gataaancca 420
agnatngtng aattcattct tttaaa 446

<210> 6365

<211> 535

<212> DNA

<213> Homo sapiens

<400> 6365

cagttgcaaa tgaatgactt tattaatgag actntttaga caatgtinctt cgtttaaatg 60
aanatgtinct tctaacataa tctgtccgtt ataactngng tcatacagtc aatacattta 120
aacaatgac aaggtaaate cttatgttaa atataagata atnccactt tcatttatta 180
ttttctaata taaaataggc ttacctaaaa caaacctgaa aagtttgaac tntgcaagta 240
gatncagttc tntttcacia tctactagaa taatcattcc ctatattatt caatctgact 300

ttttagtinc ctcattcttct tttttatcca ttcaaagttt tatgctaaac aaaaactata 360
tgaatagggt caaacctgtt aaaagtgnc accgttgaag acttcctttc caatttcattg 420
gacatatncc tatectaaaa tnggaattaa aaattttccc tttttaaaac ccaccgnttt 480
caaatcccgn aattttttac ctctttttta gnttngggat gggtttttgc tttna 535

<210> 6366

<211> 568

<212> DNA

<213> Homo sapiens

<400> 6366

ctcttgagac agagtttcac tcttgtcatc caggctggag tgcaatggcg caatctcggc 60
ccactgcagc ctccatctcc tgggttcaag cgagtctcct gcctaagcct cccaagtagc 120
tgggattaca gacgcccacc accacaccca gctaattttt gtatttttag tagagatggg 180
gtttcgccac gttggccagg ctgggtcatga actcctgacc tcaggatgac caccgcctc 240
agcctcctaa agtgctggga ttacaggtgt gagccaccgc acccagccac aaatttttct 300
taaagcattt atagctttga gtctcccttt cacacactca actagactgt atgccccacg 360
aaggcagaga ttttcggctg gttcttncct gntgggatcc tcaacatcta aaaatagngg 420
ctggcatana agtaaaaagt tctataagna ttttggtaaa nggntgaatc atatgctctg 480
taaaaaccng gtttttttat ttccaaaata nttaataat ngcttaattt tnggcccac 540
aactggggga tttggnaaag gggggaan 568

<210> 6367

<211> 492

<212> DNA

<213> Homo sapiens

<400> 6367

gaaacatcta aaatgtaaac atcattctta gcctgcagac catacacaaa cagaggttaa 60

gcctgattta gcttcaggct atagtttccc acttccagga ttaaatacacc aaaatggcag 120
 tatctgtgtc ttctgtgtct catggttgca tatcatcatt gcattgctct gaagaagctg 180
 aaaatgcaga gcaatgggat ccctgacttg actgtgggca gagacagagt aggcaatgaa 240
 agtgctgcaa aggccttggg gagagaggaa agtaggctag gacaatggga ctagtcttgg 300
 ggaaaaagga cttctctgtg ctttttagct ccagagaagg aatgtaaagc aactttcaca 360
 ccatcatctg ggctgtagcg gaacagttag tatctctgat gaatgatggg ctctatatgt 420
 ggtgggctgc ctttcagctt ggatcaagtg ctgcaaanc tanagacang nttacccatn 480
 gncntaacc ag 492

<210> 6368

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6368

aaccagaaaa ccactctca ggagttgtca cagccatagc accttgacca cccaagtga 60
 actttgtact cggatatttat acagaaacat aaattgcagc aaacattcta ctcaatattt 120
 ctgccttcca gtgccttgat ccgatacctag ttttccac tactatcctg tcactacttt 180
 ttccatctcc ttagatccc gatgcccttc atccctttta gcgacaatgc attaggcaaa 240
 actctgctac ccaacatttt tatcttggac ccacacacac taacacaaac tgcccatccc 300
 ctcccaggc ccactccagt gctggctacc ctttaatta tcttactgtg caatcctaag 360
 tggttaataa gtcaagtgat ccctctacat gctcaactaa aatcaagact tccaagaaga 420
 aaccgccttc ctcttctgtg gttcagaatt attttttggg ccanggatgg tggcttatgc 480
 ctataatggc agtatttttg gaagctgang gcaggaggat cacttgagtc caaaagtttg 540
 gaacagcctg gggnacatgg gcaggacctg gttttctnaa aaa 583

<210> 6369

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6369

```
acaggtggtg gttgtacagg caattagtgc tctctgtcag aaataccctc gaaagcacag 60
tgtcatgatg actttcctct ccaacatgct ccgagatgat gtaggtagac tacttttta 120
tcataggaag ttgctgtctt aaattccttag gattgccatg aaataccata gtgttttaag 180
atttccttat catctcagta tgcctctcaa gtagtacact aagtctggtt actgtcttat 240
tactaaacat gccattgctt tgctttcccc acttggagaa aaaaacactt ttgcttcttt 300
cataaaaggt gggaaatgaa atttgaatat tataagcata aaccttggag tgtaagcatt 360
tctccaaaat gtgtccctag aatgaatggc agttttatct tcttttttgc caggaggct 420
ttgagtacaa gcggccattg tggactgnat aatcagcatt gtggaagaga accctgagag 480
taaagaacag gcctagncca ctttngnaa tcattggggc tgggacacct ggtctggtac 540
taaaatctca cttgtgggca aanaggnctt aaa 573
```

<210> 6370

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6370

```
gacggtgtca aactctgctt tattggaata gagaatacag gcagcaggaa tcacgttgg 60
tgctggcagc tccaggctcc ctgccccac gggctctccc acttgtctgg atcaggggag 120
acctccactt tgaagaacaa tatgggggtgg gagcttccaa tgtgcattct gctaccagcc 180
tcaggattag cagcaagatg ccaacagcaa cagcaacagc aacagcaaca gcaacaaagg 240
actggactcg acacttcagg aaaggacgtg tagaagagaa agtcagaccc acagtgtcac 300
gtgttaacaa cggctcccaca acagcagaca cgacactggt gtgcaccggt tgtaccacct 360
gtggggaagg cttgcaagca caccgacagn ccctgagggg cccggcattc tctnccaa 420
catgagaaag aattaacaca cacacacaca tgttcacatt ttntgcgang gacagtcaaa 480
ttangnncca aaggaggatg aaaacatttt agagaacnca aaagcctggt gccttgccca 540
```

ataggcgtna ggctggacac aaaaggctgg nttggncctgg

580

<210> 6371

<211> 566

<212> DNA

<213> Homo sapiens

<400> 6371

```

gaaaggagtc tcacactgtc gcccattgctg gagtgcaatg gtgcaatcta agctcactgc 60
aacctccacc tcctgggttc aagcaattct cctgcctcag ccttccaagt agctgggatt 120
acaggcgccc accaccatgc ctggctaagt tttgtatatt ttagtagaga cgggggtttca 180
ctatgtttgt caggctggtc ttgaactcct gacctcgtga tctgcccacc tcggcctccc 240
aaaatgcagg gattccaggc gtgagccacc acacctggcc taatgctggc ttttttctgt 300
ccttcaatca tgtcaagctt gttttcacct caggtatatt accaaatggt cgttgntctt 360
gaaattctct ctgccctgat cttaaagggc tgnttcttgg cattcagaat tagtactcat 420
acttcattag aataagcctt tttgaacctt tctttactaa gtccctcatt taataatncc 480
tataataagc tggaattttt gcttggttgg ctatggcaat cttgnccagt agaattcgaa 540
ttcatgagaa acaaggtttt gtttgt 566
    
```

<210> 6372

<211> 511

<212> DNA

<213> Homo sapiens

<400> 6372

```

aaagagatag ggtctcactt tgctgcccac gctaagtgtg gtggcacgat catagctcac 60
tgcaaccttg aactcctggg ctcaaacaat actcttgccg cagacgcctg agctgacagg 120
ggcacaacat catgccaagg tagcttttaa atttcttgta gagaccagaa cttaccatat 180
tgtccaggct ggtctagcct caagggatcc tgtggcctca gactcccaa gactgggat 240
    
```

taaaggttcc ctatcttaac tgtcagtatc atggttgtga tgtttagca tagttttgac 300
 aaaatgtttc catcaatgga aactttgtaa aaggtaaaa gaatctcatt tcttaggatt 360
 gcatgtcaat ctacaattat ctcaaaacta aaagttaaat gaagactttt tttttttttt 420
 tttttttgan acagggcttt tgttgnccaa gcttganttc aatggcncaa aaaaacagnt 480
 tactggaacc ttgaccnccc aggttaaana a 511

<210> 6373

<211> 572

<212> DNA

<213> Homo sapiens

<400> 6373

gttttttaaa catagttgct gtaaactgtc atgggaaata cagtctttat aataggtttt 60
 gatagaataa ttgagtaatt ccccccata agtacatttt attgactgtt actgcataat 120
 aggcgataaa tctgatgctt atttggaaaa gaagtaggca ttcttttagat gagctgtgct 180
 ttgaagactg ttatgaaaag gaataagaag tcagcatagt ggcaactcctg gtttcctttt 240
 ttggccccgc cacagaaaag atggatgtag taagaaagt ggagtgaag agaaagtcc 300
 agggagaggg gaggggagct agtagtcac agctaaaaaa gagaagaaga aaagtgattt 360
 taaggaaaaa aaaattaata gaataaaga tnaaaagagt gattaattct tactttcaat 420
 ggtaagaata caggtctagc tgcagatcct ttattggtag ctgntttaca catatactct 480
 cctcatcttc tggggaaagt tcttggtagt naangcngt aagttctccc nttcaatata 540
 tggaaggctt ttcacccgna ggatttntcc tt 572

<210> 6374

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6374

gctgctgtat cttttaaaaa agcaaaatca actcacattt aagcaccaac tccatgcaag 60
 taacctgaac gggtcagttt ttttgtcatg tatgtggcct ttggttctcc aactacatgg 120
 gatctgtgtt gttagcttaa aaaatacaga attggccttt caaaaaaaaa taataatcta 180
 cagcaacca taaatagtct caaacaaccc tgctgactgc agctgccttc tgaaggctgg 240
 gaaaaggagg tggagataga gcagaaagag gcagggaag gggacgctgc agctagctac 300
 atagcaagga acacgcccc atcatgtcct ctttgccttg tcagaaggcg ggttgtttgc 360
 agtctcctga tcaggctgcc ttagaaacga ttaaaaaaaaa aggaggcagg aagactaaca 420
 actaaaaaat gccagcttct tgaaaaggan gggncnnggt ccttgggaac ttcctccttc 480
 ccttttttcc aggaactttc cgtaaactta aaggggtgcc ggggcncaat aggggacaag 540
 gggtttgncc aagaaatttt gggngcncca ccggn 575

<210> 6375

<211> 566

<212> DNA

<213> Homo sapiens

<400> 6375

gatctgattg gccaccttct ccaattcttc ttgcaactgg gttgaagacg tatgagcacg 60
 ggcaaaactca ttaaatgtct gccaaagcact tttgagagag ctaataaaac cctgcttcaa 120
 atcagatccc atacgagaga gactctcttt caattctaaa tgaagtcttt ttctgccttt 180
 gtgatgtgga atgagaacag ctttttaggtc caaatctgga acaatcatag gttctaattct 240
 atatgccact ggatcaagcg gatgataaat attgaagaac cctttacagg taggaaggct 300
 gtaattctca tctatcctat caactcctcg aatagtgaga aacatagcaa ttggagaccc 360
 caaggcaaag aatatctctg gttcaaaatc taatgagttg taagcaacag aaacctgtcc 420
 ggcgccaaact tcaaaagatc ataattcaca cacacagaag acacgcaagc accaactggg 480
 aagtttcttc tttggctcat tggattctga ngggaaggga ancntgcttt agncttctgg 540
 gcactttgnt ctgggccttt gganaa 566

<210> 6376

<211> 558

<212> DNA

<213> Homo sapiens

<400> 6376

```

caaagggagt tttaaaaaaa tttattggct atgtttgatt atccacaaca gaatttcct 60
taattagcac aggaaattga aagttggta taatttaata tctctgctcg tcttcaacag 120
acatactcag catttatact tgtaaataga attgagtttt cattgtttcg ttttctgttt 180
ttgtttcctt aggaacaaga ggatgaagga aatatggta gcattttaat aacaccataa 240
atccaagata ataagtaatt ctataaagtt ttccagtttc attaattcag aatttcacatca 300
tataacttga aatccaattg gcttcctctt tcttagaac aaaaaccaa gaaacctttt 360
tctgaaagac attattttcc agtattaggc caatttgcc tcaaattaag tagaatctca 420
acatcttggt gagccagttt gtaaattcca acttcattta atgctgctgt ggcaggangc 480
ttgcctggaa ctgntggagg acatntttta caatagtga aaacccgcgt tcaaaatcna 540
aacaatnccg gggtttttt 558

```

<210> 6377

<211> 563

<212> DNA

<213> Homo sapiens

<400> 6377

```

gttttttttt gcttttgagg gaattaataa gatataatta atttgttctt aacttttgaa 60
agaaattttt agatggaggc aactgggatg tttgtgataa tagataagaa agacaccact 120
gacctgtagt taaattggtt tgaattgcag atattcatta ttgaatttat tcctgttttc 180
tcatacttta gaaaagacac ctgaacaata aatgaatcct ggatagtgtg ctgtccttca 240
aacaatgaag tgatattaat acttgcctgc aggagatgca tactacagga gagaacctt 300
agactatgtc aggccacact atgaacctcc cccacctgc cttttttctc ctttatgttt 360
ctgttaccgt actaacattg tggattaacg acactgaaat tctgcataat gtgaacagga 420

```

taaactatatt ataatcgaa aaaaaaaaaa aacaacacag ggcttctgca gggaatattc 480
 tttcctcaat attctacttt ccttaactct tctttgaatt tgcttaanca tttgaggctn 540
 cctggcaccc tttttttcca ata 563

<210> 6378

<211> 559

<212> DNA

<213> Homo sapiens

<400> 6378

actcaagaat ttttattttc agtcttcttt gtaggaatga gaaatgggaa agaattgcat 60
 tctgataaat agattaatgg ttaaacaat catggcacat tcaaaccaag aaattttgta 120
 gccatttgaa gcttgtagtg agcagtaaaa ttgccaacat acggtgagtg aaatgaagtc 180
 acagaacagt attactagtg tctatcagtt atgtaaagct aaccaaaaac cgtgcattta 240
 catgtgtgtg tttgctaatag cattttgatc aggatcgga gcactgtatc aaagcatcat 300
 aagtagactc ccttttact tttgttctc caatggctca gaattgtgaa ctctttacgg 360
 gcatgtattt tacagtttta aaacaattgt tttttgtttt ttgtttttgg tggggtttgg 420
 ggagcagggt ctcactctgt tgcccaggct ggagtgcagt ggcataattt ctgctcactg 480
 gaaccttcgc ttccangtca agtgattctt ctggctaanc ttcccagtag ctnggantac 540
 cggggggntc cccttnccn 559

<210> 6379

<211> 550

<212> DNA

<213> Homo sapiens

<400> 6379

gtccttattc attgcaaaat attgggccag tttaccctta ttgggttcat gcagatggat 60
 gttttgcaaa tgtaattttg tgcctggac taaagactgc aaccagctc ggagtaaacg 120

aaaatgcccc ctgcgatat ctgacacctt ccattcaciaa gcactctacaa atgagtcgat 180
 ttccaactca gtttcaggaa tatcaatgta ggctgtagga accctgatgt agagaaaatc 240
 actactgttg aaaaaaagtt gtttgagaat ttcagctcct gaaccaggaa gtgaggtaat 300
 gacaacatca ggaagatcca tgtggtgccc ttcagaagac aaagacttct tgcagttata 360
 taaaaagtca aaggcagtgg caaaacctgt taaggaatgg ccaattggaa cctcatctcc 420
 tgggtgcattc tctactagcc agtctttgta gccaacctac ctgtccatat atttcaagac 480
 aantcaaggc actttgcttn tnggcattac aaacagtcca tgcttaaggn gcanattggt 540
 ccataaattt 550

<210> 6380

<211> 584

<212> DNA

<213> Homo sapiens

<400> 6380

aaaaaataaa atgttcgcac aatgggagaa aattgcttta agtggttacac cttagccaac 60
 agagcccaaa ctccgtgttt ccgttctttc tctttcggtt tctgctgagg gctggtgaca 120
 cactggcctc ttgtcagtgg ctgccggcag ggccaggaa acagtagaac ctgcagcaca 180
 gctcagtcca gaaagcgctg gcaggccttc ttccaccggc aggcctgtga cactggtcc 240
 cgggtgctga tgccatacac ctgacggcac ttcttagcct cccctcgggc tttcctggca 300
 ccactctggg cccggggtgg agaagtgaac atcagatgag atttcatcgc aggtgctggc 360
 tgctggggct cgctgaagct tagcgaccgg ctccggaccg gagagagaga gcaggcggcg 420
 gagggggcag cagcccagct gacactgggtg tagatgtgtg gtgagactgg gaatctggaa 480
 ggatggcaga acctgcggaa gacnaggtgc aaccgggatt ctagcttaag gaagtgttca 540
 aaagtttgcc acaattccca aangcttata cacagcngaa nggg 584

<210> 6381

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6381

```

aaaatgtggg tcatttcttt attattttat ttgtattggt taacaatgat cagccatgca 60
agaataaatg attattgtaa aatctgcaaa caatgtaggt atgtagagag tcccttcctt 120
ggagcttgac ctgttcagac aggtatagat gagtgttccg gggcagccgt aaaaactgcc 180
agagactggg ctgcttataa cagaaacgca tggctctcca gaagcccaca ttcaaggtgt 240
ccaaaggcct ggctcctgga ggctctggag gagagcctgt tccctgtctc tcagcttctg 300
ccggttgcca gcaagtgttg ccgttcattc actccagcca ctgcctccat ctgcacacag 360
caaaacagcg tatcctgaag tgctcaacct tatagccatt attttaaaat atccggaaca 420
cacaggaccg tgggagtggc tgttgagaa atttcatga aggaagaaag attaccacta 480
agttttaaaa tgctagtttg gttggtttgg ctgggaaagg angtaaaagt gggaagtnaa 540
aatagggagt ttggggtaag gngggaaaag caaaggaacc cct 583

```

<210> 6382

<211> 586

<212> DNA

<213> Homo sapiens

<400> 6382

```

gactggatac aaattgcagt ttattaaggc tccagagtga gaaatggcac ttggttctgg 60
gcaggggcag gggcaggggt gtcagtggag ccaaaggag ctgggtccaa acatgttgga 120
gggacctcct ccatccccct accccaata aataaagtct cagctccatc tcagggtgct 180
ggtgcagggc agggatccct cactgaggag aaccagggc tgctacctcc ttcattttc 240
tccccacatt ggacctggtc acaggtcagt gagcaacagg gcttctgttg tcctagtact 300
ctgagggggc tggggagtgc aggggtggaga gctggggcct ggtggtggcc tccccgtagc 360
cagtcatagt ccgaggctgc ccagggcagg ctgagagtgg ggctgcgtt ggggacactg 420
tgcgcatccc aggtcggggc ccagcctggg ccacaagcta gatgtgcagc ttccgggtca 480
tcagggtgct tcaggccaga ctnttgcgt gaatgctgan gcttaaggaa ccttgggnca 540

```

ccccaaatgg tgagacaacg ggtgaaccaa ccaccngagg aaacnt 586

<210> 6383

<211> 553

<212> DNA

<213> Homo sapiens

<400> 6383

gagatggagt cttattctgt caccaggt ggaatgcagn ggcacaatct tggctcaccg 60
 caacctccac ttcttggtc aagcaattct cctgcctcaa cctnctgagg gcctgggggtt 120
 acaggcgccc accaccacgc ccggctaatt ttgtatctt tactggagac gaggtttcgc 180
 cctgttggct aggcgggtct cgaactcctg acctcaggtg agctgtccgc cttggcgctc 240
 canagtgtg ggattacagg cgtgagccac tngcccagc cttgnttata tttctgagtc 300
 aatatgtttt cctgggcata atccaaatga ctcaagtagt ttgtcttcat tttgggataa 360
 tgaaggatgc caaatntagt cttacttggt ttgtgatgaa aagaaaatat attctgcaga 420
 tagctaagaa gctaactaga ccccttggtta cactgaccta tagatatgcc ttttactt 480
 atcaacngag aagtgancct gaatcaaac tnttgtaact ggcccngatt nntgggggaa 540
 naaaacccca gtt 553

<210> 6384

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6384

gttttctact gaaacttatt atttgccatt aagaattgca aactatacta ctaagaatga 60
 acaacattct cttcattaag cttttttcaa aacacacgag acaaagctcc cttttggtca 120
 aggtgtccca cacattacca ctgcagctcc cagcacagcg gcgcaccatg aactcggacg 180
 tggagcccaa ggaatgagag atgcgaccag ctttcctgc ttcaccacag cgatggacgg 240

gtcaagctcc gcgatgctca tgcggcacgg cgggtgctgg cagtggaagc tctcgtccgg 300
 gatgaagcag ccatcagtgg gctccacggc tggctgctg gtgtgggggt ccaggtagat 360
 gagccccctca ccaacgtagc cgatgaagta gtgggcgctg ttgggcttcc tccgatgacg 420
 cccagggact ggggcatcat gaacagtgtc tagcgtctnc acgtaggcct cgttgatgtc 480
 cgtgagcccc agcgcagggg aatgagaagt accaggggct tcatggcgaa cggctgttgt 540
 gaccttaagt tccgcaggga atccgttgca ntgncg 576

<210> 6385

<211> 579

<212> DNA

<213> Homo sapiens

<400> 6385

acatatagta caatttccag tgtgatgaca tttcaatggg aaaaagattg tgcatttgca 60
 ataaacacca tcatecctga gtccacagat aaggtccccg gagaaggggc tccccctcct 120
 ttctcgctgg gttgacgttc ccagcgagtg aagccttttc tggaatgtgt gtacgcaccc 180
 tccaccaaga gttctaataa gctaagctta aagcagaaca gtgaaatggc aaaactgtac 240
 agagccctga ctttacattt cactctgaca gccagggtcg gaagcaccac atggaaagtg 300
 ctgtccataa ctgctcactt acctgctcct tgctgacagc tcccaggatc tggctccagc 360
 gagtggcaaa actgggaatt ttgccaaagg aaattactca ggaccgctaa taaaaacgcc 420
 ggctttctgca acatgcatat tccccagcc cccacctnca tcttgcccag ggcagaccat 480
 tcattaacta tctgcggggg gaacaaagaa tcccaatcct tagatgtccc aggactcatg 540
 gctcatgacc cacggaatct aaggcagcac agtggnnttt 579

<210> 6386

<211> 570

<212> DNA

<213> Homo sapiens

<400> 6386

```

gaaaaaaatc atgagtgagt taaattttaa tatttcaaac atgtaaactc tcaagagggt 60
accatgatta cagggattaa ataacataaa ggtttcctac aaactctaca cctgcttttg 120
ccccctaaat atcaaatgta gttacattct ggtgcaaact taaaagtaat tttcaaattc 180
tgtctgaaca tgggtgtctta gtctgcttgg gctgccagaa caaaatacca tagactgggt 240
ggcttaaaca acagaaataa attttctcac agttctgaag gctgggagtc caggattaag 300
gttttgcagg gtttggtttc tagtgagggc tttcttcctg gcttgcagat ggccatcttc 360
tctccatagg ctaacatggc ctctactttg tgtgtgggag agtcagagat agagcaagcc 420
ctcttgtgtc tcttcatata agcctactaa tccccatcag accaggccct tatgatctta 480
aaccctaant acatcttaaa aagccccatc ccgaaacacc atcagactgg agatggaact 540
ntaaccccat tccataccct ggagatggag 570

```

<210> 6387

<211> 557

<212> DNA

<213> Homo sapiens

<400> 6387

```

ggctgagaga ttcaagtttg ngctatatag aacactaaca gttactaaag actaggaaaa 60
tttgcaggan aaaggctatt tttaaacttc acaataattc taaaggaagc caaataataa 120
aacttctaataaatgccata acttaactat tacctctatt tgtacctttc acaaggatct 180
aggttcaaaa taagctcaaa acacagcact caccacttca acagcagctc aaagtcaaata 240
ggaaaaactt ggggtatatt ctttggagga tatactagga cctgagaagc aacatgttcc 300
tggttggttag gtccacaaaa aatttaaaca tgcagaattt tatggactga caaaaaaat 360
taccaattta agtgatcaat atattaatgg tttcagagt agtaccgat attgatgtt 420
caaggtcatg catgggtatt ttnaattcct taacctagac cgcanggtat aagtcacat 480
tctccctaata ttttgaaaaa tcttaactgg gcaatccaaa tcttgntttc cattttcnca 540
aataatgnga ngacccg 557

```

<210> 6388

<211> 585

<212> DNA

<213> Homo sapiens

<400> 6388

```

gagacggagt cttgctctgt cgcccaggct ggagtgcagt ggcgtgatct cggctcactg   60
caagctccgc cccccagggt tcacgccatt ctctgcctc agcctcccga gtagctgagg  120
tgggaggact gcttgagcct gggagticaa gaccagcctg ggcaacatag tgagacccca  180
tctctacaaa aaaaacaaaa aaaatagctg ggtgtggtag catgtgcctg cagtcccagc  240
cactcaggag gctgatgcgg gaggacagct tgagcttagg aggttttaggc tgcagtgagc  300
taagatagng ccactgcact ccagcttcag ctacagagca agaccctgtc tctaaaaata  360
taaagaaaga aaatttaaaa gtaaagaaaa agtggatcat tcggccttta agatgtggna  420
ctgcccaatt agaactttct ccatgcaatg caaattacag ncacttgagg cactgggatt  480
tctaagttna atttaactaa anacggggac ttgaaacagn ccacaccgtg ggntcctggc  540
tactgggctg gctgaacaca agggccctna ctactcaaaa gggggg                    585

```

<210> 6389

<211> 572

<212> DNA

<213> Homo sapiens

<400> 6389

```

gtagagatgg ggttttgcca tgatgccag gctggtctca agctcctgag ctcaagcgat   60
cctctgcct tggcttccca aactgcttgg attacaggca tgtgccacca catccggcct  120
aaaagttttt aagagtaata agcaaaggta gatgtgtatg tgtgtgatac tgtcatggtg  180
acatttgtcc aaacctatag aatgtgccaa gagtgaacac tgtggactct gttgatggt  240
gatgcatcaa tgcagtttca acaactgtga cacatccacc cctctggagc gagaggctctg  300
cagtggggag gctatatgtg tatgggggga aaagggggtg tatggaaact gtaccttcca  360

```


cttaattttg ctgtgaacct aaaactgctc taaaaaatag tctattttta aaaggcacat 420
gattcaatta cattttccat caataacaac tgagaggctt gggaatgatg accggtgtgg 480
actggcccgg cccattacc tgggtgcacgt ccttctgnat ccgnatcgtg gtgctggccc 540
cgacacatcn anttgggtgag gaagggtggc tt 572

<210> 6390

<211> 582

<212> DNA

<213> Homo sapiens

<400> 6390

gtgactgata ataggaattt atttttaaat aggtttcatt agttcaagtt agaatgacaa 60
taaatgtgaa gacatgtttg tctgggatgt ggtttttttt ttgntttgtt tnttgctttt 120
attcagcaaa gcgtactttt tttcccaaaa cataaaatca ttcagcaaaa aaacaaccaa 180
agaacaataa caaaaaaaca gtgcacatgc cacaagcaa accaaacata gctcagtttt 240
cctactgata acatattttg tcttttaatt ttggcatgtg gaagtcacag aaattcacag 300
acttaatatg cacacccaaa tattctaagt gcttatntag ggagtatctt tatttggaat 360
aaagaatttc gagttataaa actgatggct tataagaatg cagcttacta aattggncct 420
cgttcttaca aactggagta atcttgcctt tgagagtga aaatacatat tcatctacat 480
ttctgcagcg agtgggncca cagttaattt tcatcactgg tgggggttgg caanaatgnt 540
cactcttttt ctgntgctgg ggctggggct tccntgactt gg 582

<210> 6391

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6391

gactgaaatt aaagtgtatt tatttgcagc aatcctttaa caatgatcaa atttgacaa 60

caagcaacag caattactgc ttaagtgttg cctctagata ggagcggcag atagcaggaa 120
 actgtattat ctccaaaaca aactgcaagc cccccacccc cccgaacgtc tgtaatcaaa 180
 tcgccatctc cccaaagtct gattggcagg gcagatcacc ctaagataat gaatttatta 240
 catttcctgg gttatttaca aaagggggag ggccaatccg gattgtcccc taggtttaac 300
 tgtaaatata caagaaaaaa tggtttaaaa agaaaccacc ctagacaaaa atgttctgct 360
 cctctgcct tccttcttgt tattgcttta aatctttttc aaaaataatt gttctacaaa 420
 catattttct aaaatagttt cccaaagatt aaatatccct ttccaacccg cagtatattt 480
 ttaaaaaagc aatccttcta tgtaatcatg aaggattgta aatgggggag aaatattttc 540
 cttcctttta aaaactgggt natttttctt ttan 575

<210> 6392

<211> 476

<212> DNA

<213> Homo sapiens

<400> 6392

agttttgctc aaaatgctnc gtttattgct ctattcaatg accacnagcg aattataaaa 60
 agacacaaaa tgtctctgnc tgccgnggga taaatattta aagtcagcaa taaaaacacg 120
 tggctccaag ataatacatg ttgccaaaga gtcattgatg ccctcctgat gggctctcaa 180
 cacacgcacg gacatgggaa cacacgcaga gcaacacgca gtgagacttc tgggaaggct 240
 ttccacacgt gacacagaaa aatgtctcac gtagatcttg gctgagtcac caccacaaacc 300
 ttgagctccc ctcccctccc caacagggcc tagatcctct gggttctcca tgccccatct 360
 gccccctacc ttgccagtgc ctnacaggct gggcaccctc ctgagagcat ctgacaccca 420
 gaggccaccc tggctngat gccactcca acctagagaa ctntncctna gntgna 476

<210> 6393

<211> 566

<212> DNA

<213> Homo sapiens

<400> 6393

```

gagatagtgt gtagactctgt caccaaggct ggagtgcagt ggcaagatca tagctcactg 60
tagcctccat ctctggagtt caagggatcc tcccgctca gtctccgaag ctaatttttt 120
tttttttttt tttttagtan anacatgggt tcactatggt gcccaggcca gtctcaacct 180
cctgactgaa gcaatcctcc tgcctcagcc tcccaaagt ctaggattac agatacgagc 240
cactatgccc tggctctttc cttcttaaag aaaggacact ttaaatact tttccacac 300
acagagatga atgagcaaca gacatataag ttaggattta tttcagggtta cctgaaccac 360
ctaagagaaa acagacacac aaagcaacat cacttgacca ccgtcacact taactaatga 420
gtgtactggg acttnaggct agaacaattg ggctttctat cctctgggtcc tttcagaaac 480
aaaaggggaa aaaacngnt tnaatcctca tttgctggaa attccgggcn ctncagnatt 540
aggataacac ctncaaagtt tttctt 566

```

<210> 6394

<211> 582

<212> DNA

<213> Homo sapiens

<400> 6394

```

cattgatata gggctcttgc tttcaccca ggctggagtg gtggtgaaat cacggctcac 60
tgcagcctca acctcctggt ctgaggcaat cctcccaccc aagcctcctg agtagctggg 120
actacaggcg gcaccacat gcctggctaa ttttttaaaa attatttgtg gagacggttt 180
cactatgttg cccaggctgg tcttgaactc ccgagctcca agtgatcctc ccacctcggc 240
ctcctgaagt gctgggattc cacagggtgtg agccactgca cctggctgca aggctggtct 300
tgactgacaa cgtcaggcag tagtccagtc gctaggacag acggatcctg accctcacac 360
tggagtgggt cacaagggcg ccgtantgcc ccaccagga actcacgtct ctcccgtact 420
gctcaaaaga tacgtagcgg atgcccttgc caaagttggt gaaanacgtg ggagaacctg 480
tcngcaagcc ccttttagtc cacttgaagg accgggtcaa ggtgaaggct tnaaaacttt 540
gaccactttc cttttntan acattccaga angnggncc cg 582

```

<210> 6395

<211> 544

<212> DNA

<213> Homo sapiens

<400> 6395

```

ccccattttat tcatttattt attttttgca aacaatttta gaggcagggt gttaaactga 60
ttaaaatttc acaagattga cattattgct taaagtgctt gaattgggta cattttaaaa 120
aattaaggta cagattattt taaataaaaa ctacaatatt tttagcaaca aaataatagg 180
aatgccacac aaatacagta actatttttg ttatacagaa atggaagcca aaaataaatt 240
aatgtaatac tggaaaacag aaatttaatt aggagaaaa gtaggaaata attttcctg 300
acccatgcc a ttacatgag ttcat taca tagtgctgat aaatgccttg accatataat 360
agcaaacaag ggcaaaacat ttagtgcaca atattttaat acacgtgaat atacaaagtt 420
gatcaaaatg caatgttgaa gggataaaat ccatctgnaa taaagctaca ctncaatatc 480
taaaatagcc ctaagctcca tttggacntt ngatcatatt taggctgncc ntgaaantaa 540
gggt 544

```

<210> 6396

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6396

```

ctgcataaaa tactgtttat tttgtccttt aggaagacta aagtagtcca gtcctccctac 60
agcccagtct tgccccacc ctgcactctg tcgccttagt tcctggggac caagcaactg 120
gcattttctca agcagaccct ctcttgttg ctcttttca gtccctggag tctggcttcc 180
caaaagccaa agctggagga gagctcattg ctgaggaagc agggttggag cctgaggaga 240
tgcagagggc ctggaccct cgctggatcc cagaggccca ggggcagaga tgctgggaca 300

```

gggctctagg ggaccactgg gtgactcttg aggggctaga agcagggtg ggtgactttt 360
gctacgggtgg gctgcaacac tgtctggctt ctcaaagcgc ttgccgcaga attcacaggg 420
gaagcgcaag gcagccaccg nctctgcatg cttgcgctgg cgccagttca gggaaacctt 480
ntggcggcag gtaaaccgc atatctcaca ctgnaagggg tttttttcag ggggaaacct 540
ntnggatga caaggttctt gtantgcgna agaccggccc t 581

<210> 6397

<211> 544

<212> DNA

<213> Homo sapiens

<400> 6397

aaatagagac agggttctct gttgccagg ctggaatgca gtgaggtaat cacagctcac 60
tgcagcctcg acctcccagg cccaagcaat cctcccacct cagcctcccc agcagctggg 120
accacagatg tgcacatca caccagcta atttttgtat tttttgtaga gatggggttt 180
caccacgttg ccaggtctgg tctcgaactc ctcggctcaa gctatctgcc cacctcagct 240
tccgaaagtg cagtgtgagc tgccatggct ggccaaggct gtcttttaa 300
aagctaaaga tgtgttggtt caagaccagt ctgagcaaca tggcgagacc tcatttctac 360
taaaaagaaa aaaaaaatca gctggctgtg gtggccatgc ctgtagtcat ccagccactt 420
gaaaggctga agtgggagga tcgcttgaac ccanaanggt gaagcttcag ngaaccctga 480
ttngccctg gacttcggnc tgggtgacaa tgagaacccg gtttaaaaag ccttgnangg 540
gtgg 544

<210> 6398

<211> 559

<212> DNA

<213> Homo sapiens

<400> 6398

agtgcaagaa atgctgcac attgaagcac ttgagaatta ccatgaaatc taacaaaaaa 60
 tgtcatcaac tcaggagtaa taataaaaaa gagaaacaac cagagaggca cacagattgt 120
 tgttttttta aaaggatttt tatactatat taaaaacca caaaataaaa aagggatcaa 180
 tcaacatata tcttagaagt ccttccaaga gtcttggtat gcaacagcca tggaggctgt 240
 gacctttttc cttcttttct cagcctgcag ttcatttaag gatcaccgga gatgactcgt 300
 gctctagttc ttaaaatcaa acttgttctg ccaaatacaa gaccctgaat ttgtccaaat 360
 tgtagaaaca tgcttttacc acccgccac caaaatacct cccattcaag tcaacaaccg 420
 ctttaattgc tgattcaact ctctcaaatt ctaaaaatat ccgnactgnt tcatcatcan 480
 gggcccanga atcttggaag aaaatganaa cctgatgagt naaaggcttt tgaaatgcct 540
 tggaaggagt ttcccnttt 559

<210> 6399

<211> 522

<212> DNA

<213> Homo sapiens

<400> 6399

gagatggagt ctctctgtca cccaggctgg agtgcagtgg caccatttcg gctcactgca 60
 atttccgtct cctgggttca cgccattctc ctgcctcagc ctcccagta gctgggacta 120
 caggcacctg ccaccacacc cgaccaattt tttgtatttt tagtagagac agggtttcac 180
 ggtgtgagcc aggatggtct cgatctccag acctcgtgat ccaccacct cggctctcca 240
 aagtgctgga ttacagccat gagccaccgc gccagccga aatttatattt ttgatattgt 300
 tactttctta ctttactggg acacaatcac agatgaccta tgttgctgat cttaggtcca 360
 cactctncca gaagtcaggt tttaacttta gcctctagtt ctggaaagtt tctggcctat 420
 catagatcac agatctatca tagntcgnat ttttaggctg nccagtgggc caangggccc 480
 agcaaaccaa ggaccttcn ttagccagat attcnanaag cc 522

<210> 6400

<211> 570

<212> DNA

<213> Homo sapiens

<400> 6400

```

cagcaagagc aatgagttca tttttgtttt ctttttttga ttgaggtaaa taaaaaagct   60
ttatccagca acacggagat aanagtctgt ccaacccgac aagttccaga cccaccctg   120
ccctcacatc aggctcttcc ggtactgact gtgcggggtg gtctgtctga ggtgggagtc   180
cggggtctgc aggtccatct gtctgtacag gtctctcagc tccctgacct cctgcagcac   240
cctctttgcc tggtccaat tcgatgatgc cntcccagc agccgttccg tctccagcag   300
cagctgctct gactcanaat ccggcggaga ccgagggggg tccttggcct ttcgcttccc   360
atctcccaag tccctgaacc tctgccagaa gctcctgagt ctctccaag ttccttgct   420
accaggtcct ggatccggga caagntgcc gggttgggga gggcaagggt tngggggtcc   480
taaccgcac tggaaggttc cggccaangc anattccnt tanaaaggac tcctcaggag   540
gccaanggcc ttttttgggg ggaaattttt                                     570

```

<210> 6401

<211> 519

<212> DNA

<213> Homo sapiens

<400> 6401

```

cagcctcagt tgggacttta atgccatctt cattctttcc tagtcccttt ttagggagct   60
atcccatttt agtcatgatt ttttgattcc tggggctgta tagggaggct gggatagtaa   120
tctctgcatg ccattgttgt aacaagtctc ggccccataa attgattgga atagaagtga   180
tcataggctg aaccgtactt tcttgattat cagatcctag acaatgtaaa atcatggcac   240
tttgatacac ttctgaggcg gtgcctatgc caatgataga aacatcagcc tgggtatcca   300
ctaatecttc aaactctttc cctgaatagt gactgtacac acgggtctat cctctgagac   360
ctgattagcc caataagtgg cttttcctgc agggttggta cttcaaacc tccggtcttt   420
cggtttggtt tcccgaattt aacataaggc aaaaccngna ntgggcaatc tattcncngg   480

```

aatggccttc anggaacant ggactgaccc tactggaat

519

<210> 6402

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6402

gaagaatttc tgcaggaagg tagtggtgaa gttgtttttt ctttacaatga gttgcttcaa 60
 ttttcattcc ctcccttagc atatttatat tgtttgcctg tctgtacact gtatcagtaa 120
 atgactgtat atcatatgtc aagtctatgt tgacactttc tgcattttct actctccgaa 180
 aaattatccc aaggaaccac attgatacgt aattgttgtc tttatgatgt tccttattcc 240
 ctgggaatga ctggggattc acatgggcaa gagtaataaa ttcattccgt tccaagtttc 300
 caacaagtac acggatttta gattctacta atccaaccca ctctagatgg ttttcttctg 360
 ttgatgcgct ggcagtcaat actatataat gtctatactt ttgaaagaaa ttcggtggct 420
 caagtagttt ggaccaatct gactttcctt gaagaatttc atctgtgact gcaagacctt 480
 gttaaattct ctaccattac tggtcgagtt gatgtggacc cttttncgag aaatctgttg 540
 ngggaagcaa gggatgatg gcatganatg atcctattga 580

<210> 6403

<211> 532

<212> DNA

<213> Homo sapiens

<400> 6403

agataggcaa taaaacttca tattatgaaa gcaatatatt ccaagtttca aagatttgac 60
 aagttctgta gagtatcttt catcagtaca tgaaaacttc caaactgcat gatcttctgc 120
 caggcaggac tgggtgctat tcgctggttt gaggtcgaat ccatttcaag gcatgtcgtg 180
 gtgggacatt aatgggtggga tggtagaatg tgcagtccgg tcttgtacat tgagtgttaa 240

acctacaatg ttttggatga tagaaggac attccatctt cttacaagca gggaagtaac 300
 ggcagagctg actactggaa ggtggtgctg gtggtgcaac tggttttgga gacagtactg 360
 gaattcttct actcacatga gtgaaggac aatctggttt aatacacttt gcatcatatt 420
 taccatttgg gtgaacaaac caacattttt cagcaaattt acaattgggg aangcttttc 480
 angngaana aggggtgaat ggnaggcaca cttatnccca nttttaccag cc 532

<210> 6404

<211> 547

<212> DNA

<213> Homo sapiens

<400> 6404

aaggagcaaa aggcctttatt gataaatatg cagatatgtc tgtccacagg gacctgctgt 60
 ggaggccatg accaggctgc anacctccca ctgcctgggt tacagccagg acatggccct 120
 gtgcagaccc tgccacgaca gccagccgt ccaccaccg cctcatctct gccaatgtg 180
 ctgggggagcag ggagaggcag aggcccgct caggcttccc aagccctggg gctcacgggt 240
 ggttccctcc cttccaaggg agtggcactg tgcccagggg agagccaggg gatgggggca 300
 gaggagggag acagcagctg ctccagacc tgagcagaaa accagagtga gcacagctgg 360
 cagcaccaga tgacagatct gggctccagg ggcctcctgg ttggcccttg tggctcgaac 420
 ctgcttcggg agacaggcag ggtgagggcc ctgttcgctt ttctctgaca anggttcaag 480
 ggccntgtgt ggcttgctgn ttccctgggt acccggaac tggtggnn taatggcctn 540
 naaggca 547

<210> 6405

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6405

ccaggaaaaa aattaaatct ttatitttaa aaatcccaca aatccataat gaaatcatca 60
 tctgaaaaaa aagatggtag ggaacaaaac gtgggataca tttaaaaggc actagattca 120
 ttaataaccag agccattctg gagatgccat gtaagaaatc tggagttact ctaaattctt 180
 ttcttagtgg tatcagaact ggggagaagg gtccaagcaa agtgttgcct ttgccagtgt 240
 attcggatcg aggttatgag gaagagccct tttcctttgt cagttagttt catgttggtc 300
 caccactcca gcgctgagca gctccccgat ggccctgtca tcgtatctca ggacctcctt 360
 caggatgtgc gttgtgtgct gcccagagcag ggggggcggc ctggcctctg acatcttgaa 420
 cttactgnat ctcacagctg ggcctgggac ggaaatcttc cccacagttg gatgctccat 480
 ctccataacg anggnctttt gggnaatacc cttgctgac cttgaagatg aaggaagggn 540
 cntgggncca aggaatgcca cagctttgga agcccaaaca gngttttg 588

<210> 6406

<211> 557

<212> DNA

<213> Homo sapiens

<400> 6406

aacagtaaaa aaaaattttt agtaagtcc aattgtgtgt cagaattgtg ctaggcgcag 60
 ggggcaacaa taagcaagac agatcaagcc tataccgtct tgaaatttaa gtttagggac 120
 cactctctgt caaaggatcc agcgtggta atatagattg ctgaaggcct ttgccttctt 180
 tccaccaggc aacagaattt gngtccccgt cactgcttct tcttctgtga aaaatatagc 240
 ttcagtttgg tccacgaata cagaagttgg tcagagatat tttcttcaa gcacacaaca 300
 agcaaaaactt ggccaatata caccaatcaa atgcacttcc ttttccctg ggagctcctg 360
 ccacatctca aaaacaaaaa acaaaaaggg atcacagatc tctttgaaaa tcagtggccc 420
 ctttagactt tctgngccca aaaagttagt ctttcacctc agcaccagn tttccctagt 480
 taatctgaag nttcatgggc ctatgatggn cccaaattnc tggagcttca ganacccac 540
 gtnagaaatn ctagggg 557

<210> 6407

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6407

```

gagatgaagg ttcgctcttg ttgcccagtc tgaagtgcaa tggctcgatc tcggctcact   60
gcaacttccg cctcccgggt tcaaaggatt ctctgtgcctc agcctcctga gtagctggga  120
ttacaggcat gcaccaccag gccagctaa tttttgtatt tttattagag acagggtttc  180
accatggttg tcaggctagt ctggaactcc tgacctcatg tgattcccc cgcctcagcc  240
tcccaaagtg ctgggattcc ttgctaggca ggaccaagca gagattggag aagggggctg  300
ggttggtgct gaggaacgaa aggggtggagg ccaatagctc ttgacctctt cctgtgggtc  360
aagaaaagga agggctgaat tgtcatcaaa aaggccaaag aagtaaacag aggaaaccag  420
ccaaaaaaca gaaacttagt accgtgttca agcaggacac agcatncaaa gattancaat  480
ctctgaccat cgcaaccggg gagacagaga acagatggcc cattcaggnc tttttccta  540
acagttaang gcaangnggg tcaancnaaa agggccnccc                    580

```

<210> 6408

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6408

```

gtcggtaaga aatcaccaat ttattgaatg aaaaacccaa catcaactca gtccttccca   60
ccccatctc ctctctctgg cccaggagac gctcaggaca gcagggtga gccctgggaa  120
gggctggagg agagcttggg ggaggtatgg agaatgagaa aaacactttc aaaatgaagt  180
tctgtgcaaa aacttctggg aaggagtga aggacaagag aaaagctcca aaggggctgt  240
ggggcgcana tggccgggct ggggggtgca gagggctggg ctggggccct gtgtcetcaa  300
ccactcctga gaacacggac ggtcaggaat gaggggctca gaccccggtg tggtgagagg  360
gaggtgacag ggagggaagg agcctgctgg agggaaacct ggctgggagg atgggtctgt  420

```

gcccaggctg gggcctaagg agggggaaga acagatgaag cggctgatgc cttcaatgac 480
 ctgctnttan aatccacctc cttttntcgg ggttcttgct cangaaaatg gggggacttt 540
 ctgggctttc tttggggacc ccagcattgg cnn 573

<210> 6409

<211> 503

<212> DNA

<213> Homo sapiens

<400> 6409

gagacagagt ctcactcttt tcacccatgc tggagggcaa tgggtgtggtc ttggctcatt 60
 tccacctcag cctcccagat tcaagcgatt ctctgcctc aggttcctga gtagctgana 120
 ttacaggcat gcaccaccac gcccggttaa ttggggtttt tttttgtcct tttgtttttt 180
 gtttttgacc gattctggct ctgtgccagg ctggagtga gnggtgcgat ctcagctcat 240
 tгнаacctcc atntcccagg ttcgagngat tctctgcct cagcctcctg agtagctggc 300
 actacaggng tgtgccacta tgcccagcta agttttgtac ttttagtaga gacgaggttt 360
 caccatgttg gccaggatgg tcttgatctc ttgagcttgt ccaggatggt cttgatctct 420
 tgagcttgng atccgccac cttggcctnt caaagtgctg ggattacang tntgagccac 480
 tgngctnggn cagggttttc ttt 503

<210> 6410

<211> 571

<212> DNA

<213> Homo sapiens

<400> 6410

caactgtgat cactttcaga cagaaaagcc agcttaaaga gttaatttac aagctgcatt 60
 tgggcaaatg gtgttaaag atgaacactt tctaacgctt tattcatgta ctgactagca 120
 aagacatttt ataaaatgac tactacctgg gattacaaac gcaataattg tatacattct 180

cctatacttg ttggctagcg gtggttaatg cctctctaag tattgcctac cgcaagaagc 240
 tacaacttcc ctacttaaaa aggcccttaa ttactgtgct ggattctctt ttctacaatg 300
 tcctgcaaac tatcaagctc acaatgggtt ctgttcagca gtttatttct tctctgaaat 360
 atcctgttga aatccataat cattttgaca aaacccacac agaaagcaag ccaataattt 420
 ccctggcatt tggtaaagtc tgcagaacca tcataaaagc accacatgta aaaataatta 480
 ttcaatgnat taagcgctgg cnttggacca nttcctgggtg taagcccttt acatggntaa 540
 atcattnaat ttccacanc ntttgaagg g 571

<210> 6411

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6411

ccttccacta ttgtattcct gggagcagtt ttctcagatt cgcatttggga tcccaacctt 60
 ggtctggaaa gcaaagccag ctttggagca gcttgccctg cagtctcccc agctgcagct 120
 ctccccacct tcctgggtcc cctctgggggt ccagccatg ctccaggggc gtccctccag 180
 ctggcctctg cctacctgaa gacagcaggc tgccgctgct gccgctgatg atcttcccct 240
 tgctacccat gttggccagc ttcgaggtct tcagcgtccc cgtctcggtc aggtcgatgg 300
 cgatctcact caggctgcgt gctgcatgga ttttggactt actctgcttt ctgtccagat 360
 agaactgggtg ttggcttatg gccatagccc agatggactt gatcaatgcc ggacatgcat 420
 accacgtgtg cactgcaatg ccgctgtgcc caaacgtcct ccttgtcact gaaccctgcg 480
 tgggtcatga acttncacgg aaaacttctt ttctctgaag acangttttc caactgcttc 540
 attggaanac tttcttggtt tcactttata anggg 575

<210> 6412

<211> 584

<212> DNA

<213> Homo sapiens

<400> 6412

```
caccagaact gactttatta aaaaaatgac aaaacaggtc tatacatatt tacaggctgg 60
gagccaggag gctcaggctc gacagcaggg gccaggctgc tcacttcttg gagagcttga 120
cttgcttggtg cttgggggggt gccacttga ggcagacgga gtccactgtg atgggtgggt 180
tcttatactg ggcacttttg aggtgctcct ccaccagctt ggggtgtgaca cagatcacgt 240
gctggccctt ccagtacttg accatattga gggattgcag ggtactgatg atgtcatttt 300
gggtgatact ggtcatctgg ctgaggctcct tgatggacag tgtgccccgg aagtcgccga 360
ggatctccag cagcaccag gaccagtagc tgcggtagct gagcttgccc aggtcagaca 420
gcggcttctc cggggagccc gactgtgctc tccagcttgg agagctcata actgaaagcc 480
atgangaact tcccgtaac cccggcggtg gtaggggggc aaggtcagga tgcangnccc 540
aattgtttcc atccgggact ccttntcctt gganaantac ccan 584
```

<210> 6413

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6413

```
ccagtttgat tcgtttattg acaaatacaa tgaaaaaat tcacttaaaa gaagggtntg 60
tgatcacaaa ttagactaac agggggaacg catacagcac caggagaggga gagtgaggct 120
ggacatacca ttacagagag gaggaagaga aaggatggcg cggggggcgg aggaaagaga 180
gcacctgcca aaaatccac actttccact tntcagctat cactcaatca tttttctgga 240
tagggttaac agctagaaat ggtttaaggg caacatccag gtagtttgct tggaanatca 300
gggagatgaa gagttggaga gaatgtgggt gtagcatttt gaaggattct ccagcttgaa 360
cctgttgcca naaccctttt catggtgaac tgggagtcag gaagcttaat cctggtctca 420
gctcagccat gaacttgctg tgtgactttg ggtgaatcat tttccctctg ngatcctctt 480
tcctctgntg taaaacaatc aagttggcaa gttctccatg ggtttttagcc cttttgcaat 540
gccaaccgtt ntggcaacct nggcttaacc aaga 574
```

<210> 6414

<211> 583

<212> DNA

<213> Homo sapiens

<400> 6414

```

atatttactg catgtggaaa aatatagttt agtatgcac ccctgggtgtt ttctaagatg   60
tagtttttga aaaatttttg aaatgtatta catttgtagt ttttctccga tataaattcc  120
ctgatgttga acgaagtttg gagcaactgc ttcggataca aaatgtgtac aataagatct  180
gtgatacaag taaggcaggc actacaaccc tctttatgtt tctaagtgtt gtcttcaaaa  240
taaaaactct ttttttactt taaaggctta tattggctgg gaacagtggc tcacacctgt  300
tattccagca ctttgggagg cagaggtgta tggatcattt caagtcagga gttcagatg  360
agcctggcca acacagtaaa accctgtctc tactaaaaaa tacaaaactt agcccgagcg  420
tgatggcaca tgcctgtagt cccagctatt ctggaggccc aggcaggaga attgcttgaa  480
cctggaaggc anaggttaca gtaaaccaag aattgcacca gtgcacttca ncctgggana  540
agagttttcc gaatctcant taaaaaaaaa ccaccaaacc ant                        583

```

<210> 6415

<211> 586

<212> DNA

<213> Homo sapiens

<400> 6415

```

atcatcgaaa taatttattt accactagag caccacaaaa acagacatac atcgtgttaa   60
aatacagcgt aattggatcat caaaatacaa aacagctaatt cttatatcc atttttaac  120
catgccaacg atcaaattgt actgctgatt aacacaaaaa taattgctgc ccacttgcac  180
actagcactt cacccttcc ttcacacctc cacccttcc ccatggcaat atttacttat  240
gggaaataaa gaccttacag aacccccaaa ttaaaaaaaaa aaaacagatt caagatct  300

```

taaaatagag catttaaaat attatcagtg cattcatgag gaaagacaaa ataatacaaa 360
 acaaaatgtc atcctatctg agaggaaaat gtctgcagaa ataaaagtga ttacacata 420
 atagaaaagt ggaagacaaa aaaataatca acacacactc aaatctggga ttgggttaca 480
 tncacacaag ggctgnttac tattatggca tncatctct tgcttttcca gttttaact 540
 tgcaaatcca attcttaatt aatgggnagg aaattccaaa aggaag 586

<210> 6416

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6416

aaggtcagaa ttcgtttttt ttgtttgttt ttttttttc caaaataagc ccagaccatt 60
 aaacaagtga aactccaaca aataagtctt ctccaacagc gagaaaaact gtacagttac 120
 tcaaagctga ttctgtgaga agagggtgc atacttgtgc aaacggaggc tcttgagcca 180
 tgagggcaca tctttcatgc cactgccatc ctcttgaag gtgttccggc tggagccctg 240
 ctctctgtc tgctcactgc cagaggaggc cacgctgctc tggggcgaga gaggtgcgtg 300
 atcgggcgtg gtaaaagcag cccgggcccc aagctcctct ggactcggcc actcaccagg 360
 gacctggggg cttgtaggga tgagtacat ggagcgcttc agtgggctag ggtggatttg 420
 gcaggggaaa cctgtgtttg cattgtctcc aatactgttg atggctgcng gcacttganc 480
 tggatggtgg aaagggcccg tgtccanttt ccgggngnt ttgccttgcc agcctgacct 540
 tgcttccan ggcctaactt ttgangggcc cccc 574

<210> 6417

<211> 534

<212> DNA

<213> Homo sapiens

<400> 6417

gagacggagt ttcactcttc tgcccaggct ggagtgcagt ggtgcgatct tggctcactg 60
 caacctccac cttctggttt caagcaattc tcctacctca gcctcccag tagctgggat 120
 tacaggcgcg tgccaccacg cccagctaata ttttgaattt ttagtagaga cagggtttca 180
 ccacattggc tgggctggtc tcgaactcct ggccttgtgt tccacttgcc tcagcccccc 240
 aaaatgctag gattacaggc gtaagccatt gcaccagcc aaggtggctc ttcttaaacc 300
 ttggttttagt gtcacctaca gatgaaagg gaaggagggt agtgcagaaa ggagaggag 360
 cacagaaagg aaatggggag agaattggagg aagataagga aagacaggaa aggaggagg 420
 aaaagggaag aagatgaaga tagagcgtgc tgtatgangg caaagggtgc anaagaaaca 480
 ccangaagggt ggagaattca cttctntnta anangagctg gcittttccaa atga 534

<210> 6418

<211> 577

<212> DNA

<213> Homo sapiens

<400> 6418

gagacggagt tttgctcttg tcacccaggc tggagtgcaa tggcacgac tctgctcact 60
 gcaacccccg cctctggggt tcaagcaatt ctctgcctc agcctcccga gtagctggga 120
 ttacagggtgc ctgccatcac acccgccaa tttttgtatt tttagtagag acagggtttc 180
 accatgttgc caggctagtc tcgaactcct gacctcaagt gatctgcctg ctttggcctc 240
 ccaaagtcct gggattacag gcatgagcca ctgcgcctgg ccatgctctt ttttaactctt 300
 atcaacacca agcccgtac acactcacct agactgcctc tgcctctacc ctcttgcctt 360
 agcacctttt catcatctag tggtaatccc ctgaaatgct tcccagtgcc tgccaaatca 420
 tcttatcttg cctcaaatec caagtctggc ccttttatct catatcttct gcttcctga 480
 accagttcta agagccccct tcaagtcttc catctgncct cntatctacc tatgccccan 540
 gangnaccct ttttctggg gaaaaagggg ccattct 577

<210> 6419

<211> 582

<212> DNA

<213> Homo sapiens

<400> 6419

```
gtttcctctc agatttcctt aagcagtggc ttgtggttct ccttgaaaag gtcatttact 60
tcccttgata gctgtattcc taggtatttt attctctctg tagcaattgt gaatgggagt 120
tcattcatga tttggctctc tgcttgtctg ttgctggtat ataggaatgc ttgtgatttt 180
tgaacattga ttttgtatcc tcagactttc ctgaatttgt ttatcagctt aagaaggctt 240
tggcctgaga tgatgggggt ttcttgatat aggatcatgc catctgcaaa cagaggcagg 300
ttgacttccc ctcttcctat ttgaatagct tttatttctt tctcttgcct gactgtcctg 360
gccagaactt ccaatactat gttgaatagg agtgatgaga gagggcatcc ttgttttgtg 420
ctggttttca aggggaatat ttccagcttt tgcccattct gtatgatatt gctgtgggct 480
tgtcataaat gcctantaat tttgaggatg tctttcaata cctaagtta attgaaaagt 540
ttttaatatg aangggntgg tganttttat tcnaaggctt tt 582
```

<210> 6420

<211> 468

<212> DNA

<213> Homo sapiens

<400> 6420

```
gaatgcgcag gtcgtggtat ttatttctat cgctctaaag agtattgttt caggaaaaac 60
tctgcaagcg gtgtttttcc tctgttctca caccagcaca acaatcacca acacagaaaa 120
gggcttctgt gaccaaagt gtgagggttt ttccgccaca caccaagcag tgaacaccag 180
ctgggtgttc tccaattcaa tgccagcact atagaccag agatagtatc agatctcaca 240
gctcagttcc caagactgct gcccccaact cccagacgt cagtcgcaag tccgggcctc 300
tggaacttga gagcaaccag cttcaagttg gggttctcac aactccctct ttgagatcgg 360
tgtttttttt ttttttttcc agatggaatc tcgctcttgt tgccccccag tggngngaatt 420
ggcncaacct nggntcaccg naacctntgc tcccaggttc aagcaatt 468
```

<210> 6421

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6421

```

gagacggagt ctcactctgc agcccaggtt ggagtgcagt gacatgatct cggctcactg   60
caagctctgc ctcccaagtt cacggtgtcc tcctacctca gcctcctgaa tagctgggac  120
tacaggtgcc cgccaccacg cccgtcttat tttttgtatt tttagtagcg atagggtttc  180
accgtgttag ccaggatggg ctcaatctct tgacattgtg atccgcctgc ctcagcctcc  240
caaagtgcctg ggattatagg cgcgagccac cgcacccggc caatatatct ttacttctta  300
taagaaatga gtaactttat taattctacc aacagataac attcttcttc tcagagagta  360
atatgcaatc atttctaac cttattttat tgcgctatat tttaaatata ataaacgtgt  420
caaaaatgtg gtttcgtact ttttataaat tgatatatct acctaattac actaaatcta  480
agaaaatcta tgggcttatt caaacttctc ttctcttctt cagangcaaa cctgnataat  540
tccgtgggtt ggttggttgg tttnaanacc aaa                               573

```

<210> 6422

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6422

```

cttctttttt tttttcttc tagcatacct ctggtggcag gaaaggttga ttgccacatt   60
agggaaaaat caaagaatct atattagtca aaacaatctt gaaaaagata acttacatca  120
cctgatttca agactactat aaaactacca tgatcaagac atttctgctc atcaaaagac  180
atcactaagg aaaagaaaat gaataagcaa gacatgcctt tgaggaaaaa tatctgcaat  240
ataggtatgt atatgtgaca aaggatttct agtgataaaa tataaaaatg ccctattggt  300

```

aactgttgat atgaataaca aaaataatga gatttaagaa catgtaaaag attggaacag 360
 tcaatttaca aaagaaaata tgtgactggc taacaagcaa atgaaaagtt ctcaacatca 420
 gtactcatca gggaaatgca actaacatct tacatctact aacatgacta aatcaaatg 480
 gagaacaatn tcagatggta gtgagcnttg aagagccact ngnactttca taccttngtg 540
 ccgggggtgt aaaatgggtgc catcggttcan aaactcng 578

<210> 6423

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6423

atcgtttaatt taatttgctc aaattttgtt taaaatgttt acatctatat ccatgaagaa 60
 tactgattct ttgttttgct gttatctttg ttgaatttta gtatcacagt aacaatgata 120
 gttaccaatt tgttataata aaatgagtta agaagtattc tcattttttt ttcttaatgg 180
 aagactttac ataagattca caatatttct ttcttgaagt ttgataaaat ttattagtgt 240
 ggccatttag gcttcacatt gtcttgggtg aataattttt aattgcaaat tcagcttctc 300
 taatcaatat aggatacta aaattttcta ttgctcctgg gtaataattt gtgttttcca 360
 aagaatttat tttttcaac taagttgtct aatttactgg cttagagctg tttatgatat 420
 tctcttataa ggccttttaa tgtccatatg atccgcagtg atgtctccta tttattaaa 480
 tatactggta aatagtgtct tctctcttat tctgggatag tctaantaga gctttatctt 540
 aactaacttt ncaagaactc ttttagttca tatt 574

<210> 6424

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6424

aacaaaaaaa aggaaaaaca aaagcctaaa atctgagttc tagaaccaga gagatttggg 60
aaccataaga tctagaatca gaaggagttg aggggtggtaa ggtctaaaac cagagaaatg 120
tataaggcaa agtctaaaat cagaagatat ttgaaggctg aattctagac ccagggtaat 180
ttggagtcag atcttgagtg aggaggagct ggaaatgatg aagtctagag ccaagggaac 240
ttacggaatg aggtctagaa tcagaaggca cttgtaagtc agttctagaa ccagagaaac 300
agcagatcac cagatcttga atcaggaccc tggaggtggc accttctaga agttgtgtag 360
tctggaacta gtgagtggta caggatcatga gggtcagaat ctaggagAAC tagagcatcg 420
tctggttcta gaagaactgg ttattataag ataaggacag ggtcgggcac ggtggcttat 480
gcctgtaatc ccacactttg ggangctnaa gccggtggat catcttgagg ccagagtcaa 540
gaccagncct tcnaattggc aaaaccccg ttttctaa 578

<210> 6425

<211> 569

<212> DNA

<213> Homo sapiens

<400> 6425

cacatatgtt cttgacttgt acagaaaatc ccaaatttta aatgattccc caactcagcc 60
agttctatag atgaggccag atcatttttg agaattaaga taagagtggg aacttggtta 120
aacaaaaatg aaaataaaac ccacctcact cctgtatctc tccctgatta gacattaaag 180
aggatgaatc ctgcctctgg ctgcttcagc cttccaggaa tgaagagcca tccaccttgc 240
ccttctcagc cagccacagg cagctcttct gattcttccc tcacagcagt ggcggtccag 300
ccccccctc ccctgcacag tgcctgagaa agtttccag gatttcatct ttagctctta 360
ctgatccagt ttctgaagct ttaggctgat tatcaaaaat cttatgttca cttcttcctt 420
caacaaatta acatgtggtt aaaaaaaaaat accaccatta gcccatgctg ctttaagtta 480
tttcattggt ggacaagaat aaaaaccagc cttacactn tgaccncatt tggattaaag 540
gttaccaaat tccacnttag actntgggg 569

<210> 6426

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6426

```

agtatatgtc acgcagcaat ttatcaaaag cttttgttgt gaaaacactt ttcttaaata   60
cacaattaaa agatatgatt aagcacttac aggatgtgaa atatttaaag gtaatacaca  120
ataatcgggt taccaaaagg acgccttcca atttttcttt ctattcattt tgatgttttg  180
ttcttttcaa aacattttct ctcattacat tcattactaa aggccttact ttaaatacat  240
catgctacat tttgttctcc tcttcaaag ccaatgtttt aacaatttga attctctggc  300
ctgggaaaaa gaaaagttat ccacttaca ggtatacgta ttgacaacat ggatgttaca  360
gtccaaacaa cagcacaaaa tcaacatgt acatgtaaca tagtgaaatg agtccacgtt  420
ttctacacgc tacaggatag gaagagctgg ctcttaaggc ccagggtca catgattatg  480
cacttgtaaa agcagcttct cantggtgtt gggcatctgg ggatttcttc ttgggcttct  540
ggaggcccggt ggtgggcttt ttccttggnn attaacaacn                        580

```

<210> 6427

<211> 578

<212> DNA

<213> Homo sapiens

<400> 6427

```

aacaagctg gcacctacca acacttgtag cgggtgtcat gcacaatatt gagcctgccc   60
atcatgcatt gcaacaggaa ggtggatttg aaaagggaaa agaattaaaa catcccatca  120
cacgtgiaat tagaaaattc atttgaacaa agaagaaaaa ttgttattat gggaacagtg  180
gcatgtaact gtcagcacia tcaaatcata caatagcaca gtgatcaatt agaactagtc  240
tcaagtgaag aataaaagcc agtttaactg tgtgctggta cactttgttt ctcttaattg  300
ttgcctataa acaaaagtat tttggaagta atttaaattc acttaattct tttaaaaata  360
atattgtaat ttgttttgtt ttaattctgat tactaaccat ctggctgttt tgctatttct  420

```

gactttaact tatgaacgcc ttaacatttt ctttatatca ggcacatatt aacttactaa 480
 agatatttat tattaaatac taaataattc aatgtccaaa ctgacttaac anntaatgga 540
 aaccaacat tcatttcatt cctttgnttt aatttcng 578

<210> 6428

<211> 572

<212> DNA

<213> Homo sapiens

<400> 6428

aatggagaca gggctctgct gttgccccagg ctggtttcta actcctgggc tcaagcagtc 60
 ctctctctgc ctggcctcc caaagttctg ttactacagg aatgagccac tgtgcctggc 120
 aggaaatgca cattcttaaa aagaaacaaa tattatcacc ccaaccagtc cgaactccat 180
 gagacgctta actaatgta tgtgttgaat tgtgtccctc aaaacgatat gaagtcctat 240
 accctggtat ctgtgaaata tggccttatt tggaaacagg gtctttgccg aagtaattaa 300
 gatgaggtta tactggatta aggtgggccc caaatccaat gactcaagtc ctcataagaa 360
 gtaaagatca gactgggcac ggtggctcac acttataatc ccagcacttg ggaggccgag 420
 gcagggtgat catgagccca ggagttcgag accagcctga caacatgaca aagtcctgtc 480
 tctacaaaaa atagaaaaat tagctgggca tgggtgttgca canctgtagt cccagctact 540
 taggaggttt gattggaaaa acnctaancg gg 572

<210> 6429

<211> 549

<212> DNA

<213> Homo sapiens

<400> 6429

gagataaggt cttgctatgt tgctcaggct ggttttgaac ttctgagctc aaatgacct 60
 ccctcctttg cctcccaaag tgctgagatt ataggcctga aacactgtgc cccgcctaaa 120

ctcattcttc tgcatgttaa agttcaaagg ctactataaa ggacgtatct taagaaatcc 180
 ttccttcttg aataatgtct gccccttgca attttcaaag tactttaaga tcatgagatc 240
 tcagttgttt agcagaactc ttaaactcta aattatcttc aattcctaag gtcttgggta 300
 cttcaattaa cattccattt aacaaatatt tgtgaatacc aattctgtgc caggtttagac 360
 caagaggact caaagaagag gaagaaatcc ttgtcttcaa caggctctggc cagctctgaa 420
 gattccctga aatgtgacat gtaccgtgac tgttgcatc tggagtagcc actacactgg 480
 nntaaatcnc aaattgggga ggctcttcta aggagtncca cagnatttca ccaaggngat 540
 cccggntaa 549

<210> 6430

<211> 534

<212> DNA

<213> Homo sapiens

<400> 6430

ccagtaaagt tcttttattc ggatttaacc taaaatagtt cgcttgatct ctntttgata 60
 gagaaatgaa atctccagtt ntatagacta taangaaaa gtattgaatt tgcataattc 120
 caataaaaga tatttgcttc atgctttggg catntatcat agtngcccaa aagactntgt 180
 ccagtaaaca taactgtcac agtactgaag cgcaaactta caaaattgnc ttgngttac 240
 cacaacacac acagtnttta gtcagctgac tattcatgtt gtttgaaaag catgaaaatn 300
 caggttttta gcatgcncac ccagttggaa aaggacttgc tcctccggaa acaccattca 360
 ttcgcttttg canagctgag agcacctgtg catgtgaaca agcaggtagg tatctcactg 420
 gtttctgcag tcatcacttt ccttgatagg taagttttga tnccanccag gggaaaagtc 480
 caggctttta cctcagcttt ttccttanat ttngcctttn tnggaanaat tttc 534

<210> 6431

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6431

```

aaataatgag aattagttca tgtaggagt gcatggatct atgattccac ccaacactcc 60
ccctcaaga tcttacgggg tagacgccat ttgaagcaaa gggagtgtga tggttgatcc 120
tggtataaca tcaggagctt taaatcccaa aaatgtgggg ttgctcatct tggcccagta 180
gtttgccgct gttgctaagt ttgggaacat tcgtgggtgac agctccccaa taatgggggtg 240
gcaaagtaca cccccaaact caaaatattt ccccaatgcc tttttaacca ttgttttttt 300
tctcctcaaa gactgggatc tcagacacaa tggcccgtag agcaatggag ccatccatgc 360
actgatctag aaacattctc acagcattaa taggttgtca tctgtgcttt cttggcaact 420
aacttgactt gcgtagcttg tgtanagggg attcaaagtc tncaaatinga agtgtgaaca 480
ttaattcttc caacccatgg tcttgagctg atccaaccta tggctggatc tgctttgcaa 540
cttgnttann ngaataagca cttttancat gggnaagnct ttcaataa 588

```

<210> 6432

<211> 525

<212> DNA

<213> Homo sapiens

<400> 6432

```

ctgagatgga gtttcaactct tgtagccag gctgggggta aatgctgtga tctaggctta 60
ctgcaacctc tgcctcctgg attcaggcga ttctcctgcc tcagcctccc aagtagctgg 120
gattacaggc acccaccatc catgcctgac taattttttg tatatttacc cgaaacgagg 180
tttcaccatg taggccaggc tggctctgaa ctctggcca caggtgatcc atccccitca 240
gactcccaaa atgttgggat tacaagcgtg agccaccgtg cccggcctta aacatgcaaa 300
tctgattatc tctctccctt tcttaaaaat gttccttttt tccattgccc ttaggtaata 360
ggcccaaate cacaccttgt gtataggtcc agaagacctt caggcctacc ccagaccctt 420
cctggccctn agccacactc ctgccttgca gttcctntga catgaatgca atcntttctg 480
gcttaagggn tttnacctan taagttcact tnaactggaa cgtca 525

```

<210> 6433

<211> 589

<212> DNA

<213> Homo sapiens

<400> 6433

```

caaataaggc taatttattt attacatgga tcctgacctt gagttaagta ttcagaacaa   60
aaataaaatg tcccagcctg gatagagtga caatactttc tctccatttc tatctcaagc  120
tattaaagat tacctgcggc agcattcttt tgttggaact tggttaaata catgttcatt  180
cctttcttaa agtccttata cccaatgtag tcatgcagca ttcggatgac agatgcacct  240
ttgctatatg atatagcatc aaatatctca tcaacctcag atggatggcc cacactgact  300
tcaataggat ggctgttata taaggcgtca agctcctggg cacgggtgta atcagcagaa  360
acaaactgag tccaaatata atactctggg aagcagtggc ctacacacag atattcaatc  420
caggatgcaa aaccttcatt taaccaaaga tgagtccacc attccatagt ancaagattt  480
ccaaaccatt gatnggcaaa gtcatgtccc acaancngga gcanccact ggcgggatga  540
agaacaggaa tttttggatc aataagcaat gcanctccta tgttnaaaa               589

```

<210> 6434

<211> 593

<212> DNA

<213> Homo sapiens

<400> 6434

```

aatttttttg gactgagtct cgctcttttg cccaggccgg agtgcagtgg tgctatctcg   60
gctcactgca agctctgcct cctgggttca caccattctc ctgcctcagc ctcccaagta  120
gctgagacta caggcgctg gctaattttc tgtattttta gtagagacag ggtttcaccg  180
tgttagccag gatggtctcc atctcctgac ctctgatcc gtctgccttg gcctcccaa  240
gtgctgggat tacaggcatg agccaccacg cctggcccaa ctttactgat cttttataat  300
gatctttcta tgttacttat ttagggatat cttttttaga caatcaatat gatccaataa  360

```

tttacattta gtgactcagc aacataacttg atctaaatta tgtcactctt tatgtgatgc 420
tatttggttg tatggcttca aacaaaaacc ttaattgggc ttcacttcta ataaagatga 480
attttacctt ttaatctaaa aatgacattg aaaacttta ctttttaana attctnggaa 540
tcattatttt gnnccaaaag ccttaaangc cttttaaaag aagcctgatt tnt 593

<210> 6435

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6435

ggaggtatgt cctgaacttc catactatta actagacaca gaactgcaca gcaggatgcc 60
tgctgtgtgc attccagata tagtacatag ctgagctctc aaatcagcaa caaagaagat 120
aagcacacca ggtccacata gcagagaact tcacattatc aagtttctat ccaaagcttc 180
aaagaagcaa ataataat ttt gaaagactat gtgataaaag gatcaat ttt tagaaagttt 240
catgatctgt catggatcaa tagtttataa aggacactga aacttggatg ttgaggcaat 300
gtcaaattgc cccaagt ttc taaatgctta ctcttcattt ctgtacttaa tgtggacttg 360
gatcaaata ggcatagaacc agcattgggc cgtggactgc attttgactc gtattggttt 420
aaagaagttg tcgtttactc ctgaggttag tctcagatct aattttctct tggattaata 480
tgacaactaa tacttgaagc acttagctta ctactagagg aatctatcta ctgggggatg 540
ccttatggnc ctaactttta tcaaattttt aagnnttgat aaaaan cn 588

<210> 6436

<211> 598

<212> DNA

<213> Homo sapiens

<400> 6436

gagacggagt ttcgctcttg ttgcccaggc tctgttttaa aaaaaaaaaa aaaaaaggtt 60

tattattgct aatactatgg aggggctcag agatgtgagg aataagacaa agctgcttta 120
 tttggtgaat ggcagtcatt agtgactttt aaaagagcag cttggtagaa tgtagggagg 180
 ttgggttatt ttctttttta cagatnctat ttattaggca ctatataaga ttaaaagaga 240
 ctttaacacc tcttttaaaa aaaggcttta tctctttcaa tgcttacact gactctttta 300
 acaccctttt tatagatgaa aagtgcnatt gagagagggt aagtgacttg ttcaagccct 360
 tgtataaatt aagtatggac acaggattta acccagttgt gtcctgaccc aaagcttatt 420
 attttaatga gttgcctcct ctctcattca tggaagccag aatgcaagtg gttaaggagt 480
 aataaagaag gtgaatggaa ccnggtatag aggactctta aggacagggt ttggccaaaa 540
 gtgnaaaggg aaaaaattgg gatgttgctt ttnggtttnc angggaaagg accnttnt 598

<210> 6437

<211> 589

<212> DNA

<213> Homo sapiens

<400> 6437

cagtgaatt cattcacctt gacatgtgta gcaataatca gtcattttga cctctgtgta 60
 ccaatgatag ctaaaatata ttgagcattt tctgtgtatc agacagtctc aactacttta 120
 catgggttaa ctcaatcttc acaataatcc ttgaggtac atagtattat caacctactc 180
 cgtatgaaga gactaaaatt caaagggtt aagcaacttg cctaaaataa atgttactag 240
 gcggcagagt ctggataaga acactacaat ttattaatct attctctgtc tatggatgtt 300
 tgggcagttc taattttttg ctatttcaat aaatgttgct aggaataata gtgtataggc 360
 cttatggtat atatgacaaa aagtttctct agaagacaaa gaatagaaat actgggtcac 420
 aggatataca tatgttccag ttctcataat gaaaatgatt ttgangtgg tttgaacaat 480
 tcatgtnttc acaatcgggg ctccatattc ttaccaagac taggactggc aactgggtca 540
 ctcttaaatg ganttcngnt atttaaatc cattttaang gacccccct 589

<210> 6438

<211> 553

<212> DNA

<213> Homo sapiens

<400> 6438

```

gggttttaaaa ataaaagcac ggaccaatga ggtgggaaag actgccaggc tggttctttt 60
acctaggatc tcagtaatac cagattccag attccctctc ggcctctaag gctctgaatc 120
caggttagag gtctgaaccc ctccccccgt ccccaaattg ggggcattta gttttttgtt 180
tcataaatac tgtccaggca actcaaagaa gacaccaagg ttggactctg ttttctttcc 240
tgctcagttt tttgctgctc cagtgtatga attgagattt attttttaag gccctcctac 300
atttatcctg tgttgctcag aacgccgacg tttcccactg atatctgtcc tatactttca 360
aaagaaggta tgatcttctg ggatcagatg aattgcttaa gtggttacag tttttgcaag 420
ggtgtttctaa ctgatgacag tggggtaaag tgggattcta ttggcctctt gggtncatt 480
gnatctgnnt ctactatgca atttaaaant gcttngaacc ttttccacgg gctaatttga 540
tnttnccaat tgg 553

```

<210> 6439

<211> 587

<212> DNA

<213> Homo sapiens

<400> 6439

```

aactgagata aatgtagatt tacatatagt ttagaaaata atacagaatt atcccgtgta 60
ccccttacct agttaccccc aatggtaaca tcttgcaata ttataccaca atgtcacaac 120
caggatattc agatagatgt catccactga tcttactcaa aattcactca tttccatac 180
agtcctttga ttgtgtggtg gttctgtgaa atttcatccc atctgtagtt ttcattgta 240
catgccaca gtcaaggcac agaatgcttc acttccatca ctataaggaa cccttggtgt 300
gcccttttat aaccacaccc acttctctcc tctctccaa actccatctc taatccctgt 360
taaccactga tatgttcctt acttacacaa ttttatcatt tcaagaaagt tacagatatt 420
gaatcacata gtatgtaacc ttttaggatt gngtnttttc actcagcatt attccctgga 480

```

gatcatccaa gttgtggacg aatgattggg tcntttaatg gttggggang tagncnttgg 540
gattgatggn ntcacagttt aattattccc ccttgaaggc anttggg 587

<210> 6440

<211> 571

<212> DNA

<213> Homo sapiens

<400> 6440

agtaatcttt atcccttcag agaattcttc ctttaagtct tgggtgagat attttattat 60
ttttaaggnt tatatatcta tattgttaga acaagcatac tctggcaatg ttgttcttta 120
aaaaagcatg gattgcattt atatagtgtt tttttccaaa aatctgaaga aattatcaag 180
agcacttggc agagataact tgatgaaatc aggggaaaaa attgatgtcc aacttttaaa 240
tatacaaaaa cttgattgac attctacata attcaaattg tgtgcaagat gttctcaata 300
aacatttaca gactgtatcc ccacaccaat gtcagaaatt caaagctggc cctattactg 360
atgtgataca tcaacatcac aatgtcagct atcaaaaatc attttaaadc tatgtttttc 420
caacaactcc agttccatca atgaaaataa ttttaaagga tatcaagctt ggaaaccata 480
aaatatttgg caagcnttgg ttggttggtt ngttggttct tctgnttggc ctttgaatct 540
anggaaagnc nccttantct cttcaggaaa a 571

<210> 6441

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6441

cggtagagac agcatcttgc tatgttgctc aggctgatct ggaactcctg gcctcacaat 60
actcctgcct cagcctccca catgagctac catacctggc aggacattat ttttaagctc 120
ccattaggtg gaaatcaaaa gacaaagctt ttagtaacag ttcttccata aactagctgt 180

gtaatcttag gcaagtcact ctgaatccca ggtacagttt tctaattctac aaaaatgact 240
 ggaaaaaatt atttctaaga ccctctccac cttaagttat tccactagtg caaaatttaa 300
 aaataaagac tcttatgggt tggatgtttg tccccccaa atctcatgtt gaaatgtgat 360
 tcccaatgtt ggaggtgggc ctagcgggag gtgtttgggt catggaggcg gattcctcat 420
 gaatagcttg ggccctccac atggtaaata atgagtctca ctgtagttca tgccaaactg 480
 ggtggttaan agcctgccac ctcccttttt tttggtcng gtttcccata tgacttggnt 540
 ggtacctttt acctttcgcc atgctggaaa aaagt 575

<210> 6442

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6442

ggattatctg ttcacttttc tagagcatat ccttcctgag aaaagaatgg atgtgtacat 60
 tttgagtcct tctatgtctg tattctgtct tcaaagtga ctgcaaattt gactgaattg 120
 agtagagttg ccgcatatgg ttgtaaagat tatgcactgc aaaaccctag ggggtcattt 180
 ttattcaaag tgttttaaaa atgcgaacca aaaccgaaaa gctctagggg atgtcattca 240
 ctgcatgttg gtttggattg aatattactt tccagaattt tgaaggcatt ttctcatttc 300
 ttctagcttg caatgataat gttaaaaagc ctgacgtcac tgtgatcgtc ttcttttcct 360
 cttctttcaa tgtgtactgn tttcttcate tcccttcacc cacttccatg cttctctctc 420
 ctttttctcc acaaacttaa aaaaagattc tctttatctc tagcgttcca agatttcaca 480
 acaaggtaac ttggtgtggg cattttctca acttttcgca tggactctgg tgggactttc 540
 aatctggaag acttataatc ntncntctg ggn 573

<210> 6443

<211> 571

<212> DNA

<213> Homo sapiens

<400> 6443

```

aaagtctaca ggtaagcaga catttctata catgtcctgg tcactctttc taaagtattt 60
ataattaggt tattgacat gtcttggata ttgttggcag tttaaataat accctcatcc 120
gtaggatatac acagaaagac tgttttcttt ataacaaaaa atactataaa gaaagagata 180
atggaaataa ggcctataat gaagacagaa tcactaacac tgcagaatt aactgataca 240
gagaagaaaa gattttttct tggaaaaggc attaatattg cagatcactg ggatactatg 300
tacatctgca aagctaaata gaacctcaga ggtccaaata gggcaatgtc atttactggt 360
tcagatcaag cccagataag taatcacaga aaaccggaag tacacttttc atagattttt 420
tttaaaaaca ctggctgaac aaaatagtgt ataaattaat gtaagaaagg cactggtagt 480
ggncagntaa tagatactcg gttttttttc tttcaagtgc cactattaat gggtaatatt 540
cctttcttgg ctattaagcn cctgnaaccn g 571

```

<210> 6444

<211> 564

<212> DNA

<213> Homo sapiens

<400> 6444

```

gttttgatgc tgcagagctt gaaactgttt tattacacac cagtgtattc tttctcaaaa 60
agtaactcaa aggaataatg tacctccata tactagactg gaagtgtaat gacacattaa 120
agtgtcacc tatggttcac gtaacctaaa tccatttcca ttatgacagg acccactatt 180
acacctaaag catagaactc agatctgtag atcatggcaa tgactaaaga gtttcttaca 240
gtggcaggca gtactgatcc cacctatgaa acaggataat tgcatatcca ttctacagaa 300
aagaaagctg aggcttagag aagttaaatt actttccag cttaaaaaaa gaatctacga 360
aatgatattt ctaattcatt agttagaggc ctggaatcaa ggtgccctta gcaatatatt 420
tttgagagc aaagaatact attcccttgg ttagagatg aagaactgag gcttttgagt 480
ggggtanggt tnctaagaag ccacagctgn ttaatgnca gcacatagaa tggctggcta 540
caggccagac ttntttttca naag 564

```


<210> 6445

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6445

```
attgagaagg agtctcgtc tgttgcccag gctggagtgc agtggcacat ctccgctcac 60
tgcaagctcc gcctcctggg ttcacgcat tctcctgcct cagcctccca cgtagctggg 120
actacaggcg cccaccacca cgcctggcca attttttgta ttttttagt agagatgggg 180
tttcaccgtg ttagccagga tggctcgtat ctctgacct tgtgatccgc ccgcctcggg 240
ctcccaaaat gctggaatta caggcgtgag ccaccacgt cagccaactt ttattcctcc 300
atttcaaccg tggagagtct gatgattttg tgccttaggg ttgctcttct caaggagtat 360
cttagtggtg ttctctgtat ttctgaatt tgaatgttgc cctgtcttgc tagattgggg 420
gaaagtcttc ccagataata tcctgaaatg ngttttccaa tttgggtcca ttcttcctg 480
gcacttttca gggaccctaa tcaatcgnag gtttggnettt ttacatagn cccatanttt 540
ttggagggtt tngtcaattc ntttcaaact ttgg 574
```

<210> 6446

<211> 552

<212> DNA

<213> Homo sapiens

<400> 6446

```
aaaacaaaa gaacaacttt aataagcttt tacggcactg caattacagg aacatcgacc 60
cataacatgc aacaaaaatg attttgcctt ttggacatat ttaacagata aacttgacat 120
tacaagtaac agcaacacat tccattcta ctgaagaaaa caaatgcgat ttaactttca 180
ggttagaaaa cgtatcttct tactgcaatc tcaagtagca tttagaaagt ttagttttcc 240
cttttctaac ctctaaaaga tgatatgatt tttaatgcaa tcatacacia ctgttttcac 300
```

attggaaata atcacgagga atcaataggt ttaggctaac tgactgattg gttttatttc 360
cattgntaat ttcaagaggg ctccctgcagt attgtggatt tcagatgggg aaaataatca 420
gaccaggagt aaacggcctt ggtctttaaa gtgggggang gaacatgcag cggcacacgg 480
ggcangtgcc tgacttttgg aagcccgatg gccacacacg gnttgnggna atagtgggtgg 540
cacggaantt na 552

<210> 6447

<211> 557

<212> DNA

<213> Homo sapiens

<400> 6447

gtaaacacat agggctctccc tatgtggcca agactagtct caaactcctg ggtgtaagcg 60
atcctcctgt cttggcctcc caaaatgcta tgattatggc tgtgagacac tgcacccggc 120
aagggaagt actttattat tattttttcc agtgggaggg tttggtcagg caggagcgg 180
ctgagaaagt attttaagc aatgtttgtt cttagttgac ttcagtgtca acaaaaatct 240
aaaaaaaaaa aaaggaaaaa aaagttttga cttactggg gcaaaatgag taacactagc 300
caaaaagtca ggatgcataa catctgtata tcatgtgacc ctggcaagtc ccagctcctc 360
aaagccaaat ttttttcatac tttctcataa ggtagaaata gtttggcaaa cgcttactga 420
actaccagga agagctccag gatagangga gctttggcat atcactagat gctnaaatc 480
ggactgggtg ctnaaatitg nggccaactt tttttcttcc cttttttttt ttttttttgg 540
naaacaaaanc cctnttt 557

<210> 6448

<211> 563

<212> DNA

<213> Homo sapiens

<400> 6448

caaaaaggca cttttctgac tttttctgct aaaagctagt agaagccttt atagcattga 60
 tgccaggggt taagcctcca ttataggaca tttcgtgata ttctgtgtag gcaaattgtag 120
 gccaatgtgt ttctgaatat gcacatgtat atgatatctt taacaatgta taaaataaat 180
 gttgtacatc ataaatagag ttctgtaact aactagcttc cataactaac tagctgtgga 240
 aactctatgg agttgtctat attcctggct tcaaattcac cagctgtaat tgagaacttt 300
 ggattaattg atctctaaat ctattcctgt ttgaagagcc catgatgtta gtgcatgcgt 360
 ggattatgtg gtttcatctg aataattgaa taaaagactt aaaagttgag agtataaaag 420
 gcattttatc cttaattcat gtagcatttt ttaagttctg agagagcaat tccctctttt 480
 aaatcccaac tgntgntctt ttnccanttg aatggggggg ggnaatgggn caaaccttta 540
 atttggcggg caaaaaatan ggc 563

<210> 6449

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6449

cctgtgtaca aaatgtttta ttttgacaaa gcagttaaaa ggctaggggtg gcccttctgc 60
 agccactggg gactgggaag agtgctctag ggacactggc cccccctg ctctgtctt 120
 cagacctctg ctctgggatt gggccaacc ctgtcctttg cagccatgtg gcgacctca 180
 gcatggagct ccttgccact gtcccccaaa ggggctcagt cgtccatctt cacgaagact 240
 ttgggccgag aaaagatctt gatggcctcc tctacctgca ccagcttccg gtccagctca 300
 gcacgggtggc tctgggtctt cagtgagtct gccccagcag gcagcagtac cagctcacgc 360
 agcagctggc tctggctctg gagcagcttg gtcaagtgtt tccagcccgc tggttctcag 420
 gcatgcccct gtggcctggg ggcatggcaa ggtccggctg gctcttgttg cgggcttngg 480
 cttccgncgc acaaggtcct gggctcaaca agtatnggc acatggccct ttggngggca 540
 ttgaaggctc cnggcctccn tt 562

<210> 6450

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6450

```
gtattctcag agctgccagg agtgcacga gcctgtaatt tcctgttctc tgaatcccc 60
atctttctgc agctccaagc tttgtgtccc acagcctgtg actctgtgct aacaaatcgc 120
tattgtccag tggggcgaat ggtggctgga actaaagaat tgctgtctgg tttctatcca 180
aatccaggta gcgagatata tgaatggact tttcgaatcg tcatgtgaat aacgtctgct 240
cggcatgaag gctcagagcc atgctaggaa ggattaactc gtaggctgac cactaacatc 300
ctttgtggta cgaggagaa acattcccaa gtatcatttt attcacactt aattttctat 360
cccatacccc caaaataagg ctagctatctt aattagttgg ctgcttttct ctttaatttt 420
agtgtttctg ttgataatgt gtaaagtttg ggaaaatgct aagtagcttt tcacttagaa 480
cactggatatt ttctctttna aggtttctan cctacattaa tattgcntaa gtaatcttat 540
tgctaaatcc caaagtaana aa 562
```

<210> 6451

<211> 536

<212> DNA

<213> Homo sapiens

<400> 6451

```
catttttttt tttttttttt ttttttttg agatagagtc tcgctctgtc acccgggctg 60
gagtgacgng gcgnggtctc ggctcactgc aaccttagcc tcccgggttc aggcaattct 120
ntngcctnag cctcccagat agctgggact acaggcgccc gccaccacgc ctggctaatt 180
gtaagccttc tttttaaaca acacactaga cacctccttg ttgaccacac tataagcttc 240
ctcctcattg ncagcatttc cacctccctt gccagaattt aaatgcctnt cagtccatac 300
agctactntc cacaacanat ggtgatgtct cattttctcg ngcttagact actaaccaaa 360
aaaaaagtcc taggaagctg gcttttagctt cccattcacc ttcctctatg ggtatgcctt 420
```

tgngaacagt ttgttcaacc tcatccaaga catgagcatg gcccaatgna aaattntggc 480
ccanaaaaat nggtggnttn agaacaaatt ttataattcc aatggctttn gggagg 536

<210> 6452

<211> 565

<212> DNA

<213> Homo sapiens

<400> 6452

cctgttttgt gccctagagg tttttacatc ttggatcaat gcataatggg aaatacataa 60
cagcaaaagg taacaagtaa gagacttttg aaaagacaat gcaaaaaaca taaacaagat 120
ctccgaagac tagaaacaga ttcccttaaa gctctctgng cttttatata tcctgaaaaa 180
tcttagngta tagcttggga taggtatacc ccagtttttg aaactactgt agaataaatg 240
gttttctaaa atttataatg gatttaactc atgttaattt taaatgtcta tatagttcac 300
ttactagtat ttctcccat aagaaaaaca ccaaccacac caatataaaa tgtgagaaag 360
aatctgatat gctgctttaa aaaaatcttc ataaatatcc cataattttc cattttggta 420
aattataatc ttttcaacag acttattacc cagtaaccaa actttttact aggatcccca 480
aaagngcccc caattttcct aaggattaat catttcccat tggatatgacc tgaaggttng 540
ggtcccttna aaggcttttn tggaa 565

<210> 6453

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6453

ggcttttttt tgagaggaag cctcgctctg tcaccaggc tggagcgcag tggcacgac 60
tcggctcact gcaacctctg cctccccac gcaagtgatt cttgtgcccc agcctcccaa 120
gtacctggga ctataagcgc gcgccacat gcccgctaa tttttgtatt tttagtagtg 180

acaggtttca ccatgttggc caggctggtc ttgaactcct ggcctcaggt gatccgcccc 240
 cctnggcctc ccaaagtgct gggattacag gcatgggcca ccacgcccc ccaataattc 300
 aatcataaaa ttctgggttc ttcaatgttc cccacatat aaacatcaaa atgttagtgg 360
 gtaatatatt aatgccttag tagaaagcat gaagggaaga agtgcaccc gcctcccatg 420
 tgctggttgc antgctctct tgcagtangg ntaaggccac gacacttaag gcttttaagg 480
 acaaacaagg anaaggaaga aggaagaatg ggaagttggt aagttaatgg ggattggagt 540
 ttaanttggg atgacaaaaa aattttggaa aanantgngg g 581

<210> 6454

<211> 531

<212> DNA

<213> Homo sapiens

<400> 6454

aattagagca ggtatgcttt tgatggtnng gaagggatgg aaaaaaggaa aagcantaga 60
 aactgnccaa ttcacatcag ttatccgtct gctttttctt gagagcttgt ggaaggngtt 120
 aacgtggctg ggaacatcaa caccttggca tgcataaat ttaagtcagg aaggccagcg 180
 atcaccttga tagcttcttc acttaggtgc tcttctcttt tcggtttcct actggttagat 240
 gtgcttgtct tctctactgt agacatgagt cttgcaaagt catcactcac tttgaggctt 300
 gaggtggana tttccagctt anaagttgtt aactcataca actccggatc cacacctggg 360
 attgaggtgc tgctgctaga gctactgtca tccacgggcc caaagaaatc aaggttcaga 420
 agagtggaac ctccctacca tctaaagggn tagtannggc nctgntactc antcaactgg 480
 ccgggtggta taaactctgg aactgaccaa agtcntgggt catatctggg a 531

<210> 6455

<211> 557

<212> DNA

<213> Homo sapiens

<400> 6455

```

aatgattaag agtttgactt attgtcttat cagctaacag tccatatttt gggctagtat 60
gtttgacaaa ggggtgacga cagctgctac aggagaatga cagaaggaca aaaaaactga 120
aatacacaaa gtaaccaacc ttcttctcct tccaaggag gacagaagag aactcacagc 180
aggccccctgc cctagcatag ctcatgtacc ttgtgacctc ccagcagagc atcatgtaga 240
tgccccataa agcagctgtt atggaaccag ctgggtccccg tggaaaggag gcaatggctc 300
tccggtgctt actgaagctg ctgcttcttt tttttttttt ttttttttgt ttgaaacaca 360
gtttcactat gtcaccacagg ctggagtgca gtggcgccat ctatctcaac tcaactgcaac 420
cttcacctnt caggttcaag cgattctcct gcctaacctt ccaagtagct gggattacan 480
gnaccacca ncacacttgg nttaattttt ggttttgagt nnaaatgggg gtttancatt 540
ttggaaagggt tggcttg 557

```

<210> 6456

<211> 574

<212> DNA

<213> Homo sapiens

<400> 6456

```

cctttccatt gtgtcagctt ttgggacaca cactttattg cacttgattt tttatacat 60
ccatttccta aacaagatat gtttattcat ctttttaac ctcattggctc agcacagggc 120
ctgacataca taggcattca accaatattt gatctccaaa gcattgacct tcatgcatcc 180
ataatccttt ttctatagta taaagatggc tgacattcag gcccccatgt atattttaag 240
gaatatataa ttcccaataa gctcttcttt ttaaagggtga ttaacagttc tagtgttcaa 300
tttcaaaatc aaaatgacat catatcaggt gtcattaaaa gacgaatgcc aaaccatatt 360
tgcctacaca ccactgcctt ttccctttct ttcattttct ctgccatatg aaagccatgg 420
gttttttttg agttttcacc atctctaaga gccctgaaca atttttaac ctataaggct 480
ttttacttca gttctgncac ctattaaaag cctgggtgtc nagactgaag atatcnctaa 540
ctctctctat cttaacnctt ttcnattctt cctg 574

```

<210> 6457

<211> 546

<212> DNA

<213> Homo sapiens

<400> 6457

```

gagacagagt ctcgctctgt ggccgtggcc caggctggag tgcagtggca caatctcggc   60
tcactgcaag ctccgcctcc tgggttcacg ccattctcct gcctcagcct cccaagtagc  120
tggaactaca ggtgcccgcc accacgcctg gctaattttt tgtattttta gtagagacgg  180
ggnttcaccg ngttagccag gatggtctcg atctcctgac ctctgatct gccgcctcg   240
gcctcccaaa gtgctgggat tacaggcgtg agccgccacg cccggcaggg accacacaat   300
ttattaacca accagntaa taaattcttn tttttttttt tttggagacg gagtctcact   360
nttgtcaccg aggctggagt gcanttgaca cgatcttgnn tacatgcaat ctccgccttc   420
tggggctcaa agcgattctt ctgcttaacc tcttgagaag cctagggatt acaaggcttt   480
ttgncaacca naaccccaan acnatttttt tggatttntt aggttcaaaa acggggaatt   540
ngncat                                     546

```

<210> 6458

<211> 573

<212> DNA

<213> Homo sapiens

<400> 6458

```

gagatggagt ttcactcttg ttgctcaggc tggagcgcaa tggcacgata tcggctcacc   60
gcaacctcca cctcccaggt tcaagcgatt ctctgcctc agcctcccaa gtagctggga  120
ttacacgcac acgccaccac gtcgggctaa tttttctatt tttagcagag atggggtttc  180
accatgttag tcaggctggg cttgaactcc tgacctcagg tgatccaccc gcctcagcct  240
cctaataaaa tttatcttaa taagataata tgtaatatata agatagagga ctgatgcctg  300
aaattaattt ttgtgctcta aaattctgtg gaagtactgc ttccaaatac gacacatatt  360

```


ttactccgta tctctttaga attaataataa agtagggaga aatgaggaac aagatagggt 420
 aaagtgaagt cctgcatgcc acttctgcct tcaacttana accgtggtgn aagttttaac 480
 aggtcttacg ggtccntgan ggcttttttag aaacttttan acttccgagn ggaaaactgg 540
 gatttccgtg gtaacctaag ggcttttanan aan 573

<210> 6459

<211> 544

<212> DNA

<213> Homo sapiens

<400> 6459

gattttgcag cacttttaat acacaaagca aaaggtaata ggctggatgg gtgaccaacc 60
 ttcattcaca tacagagccc aagtatagat acagactaat tgggaaataa gtttagagttt 120
 gcagggcctt agggctgaga gccagaaaca ctgtcctttt ggagccatg gaagcgagga 180
 tttccttttc tgaggacaaa aaggtaaaaa taagtgtttt taaagtatgg cagacacca 240
 gtcttcaata aagaagggtg ttacatcctg gccaggcctt caggcaggca gaatggagcc 300
 aggcagggcc ctgggaaagc ccaaactatt ctgcatgaag ccaggcaggg cagctggcaa 360
 gagggcacct ccttcacct ncaccacccc ccattccgat cacagttaat catctcctct 420
 gattctcaca acttcttcaa actcttttgt gcttcagaga aagccaggaa cacngggcaa 480
 ttcttaatgg ttgngnaaag taagccctgg ctgttncnta cagtttttnc cggttaant 540
 tggt 544

<210> 6460

<211> 546

<212> DNA

<213> Homo sapiens

<400> 6460

aaaaattgct aattcacaga acatggagat gagtatgttt tgaaggcttg gaagcatgca 60

agtgggagaa gaaaggagtc agctacattc tggctgtgtg cagaggcagg tcactgtggt 120
 gggagtgttc ctgtctcatg gactctgcaa atcacaatgc ttggcatggc ctcccagacc 180
 tgatggcaga gaagcaaaca ccagtcggag agctggggtc ctcccagccc tcttggccct 240
 gtggccaatt ttttctcaa tagcctcata aaatcacatt atttgagtgt ccatggctcc 300
 aaaacaagca gggatgcccc tggaccctga ttatccattg tcacccttcc tncaaacagc 360
 cacctctccc ctggagacag cccatactc cactcagacc tgtgcacttc ctggtatcct 420
 tgnccactgc tttttatggc tcatttacia acccaaattg ganggacagc aggagctgcc 480
 cataataccn gtaaagttag aaccnagnta actagnctaa cagccgatta tgtngggcaa 540
 nccact 546

<210> 6461

<211> 567

<212> DNA

<213> Homo sapiens

<400> 6461

cataataaac tttattgtga caggcggggc tgatccctcc catgttggga gacaccatgt 60
 ggcaagttag aaagctctga gcccgcctc cttggggcca cagtggtagg gatgggggaa 120
 ggggatggac cccatggctg gggtagtacc atgactggag gcgggggagg caaccagagg 180
 cctgctgctt tggggaggtg cattccccca accatgtccc gacacctctg gagttcaggc 240
 aaggaccttc cagtcctact tgtcctgcat cttctcaagg ataggcacia tcattgtcaa 300
 tttgggtcgc tttgcagggt cttcattcat gcagatcttc atgagcttac acacatgagg 360
 ggaaataacct ggtgggatgg taggccgaag gccttccaat gccaccttca ttccaatctc 420
 catattggaa gaggtcagca aagggtacct tccgtgtacc aatttccaca gaagcncttg 480
 aaaacttcac atgtctnctt gaacctttgt tngggtntta agcttttttg gcaaacttng 540
 ggggcttccc angcagntcc ttaattc 567

<210> 6462

<211> 538

<212> DNA

<213> Homo sapiens

<400> 6462

```

gagacagagt tttgcttttg ttgcccaagg tggagtgcaa tgggtgtagc tcggctcact   60
gcaacctccg cctccctggg ttcaagcaat tctcttgcc cagcctccca agtagctggg   120
attacaggca tgcaccacca catccggcca attttgtatt ttcagtaggg acagaatttc   180
tccatgttgg tcaggctggg ctgagctcc tgacctcaag tgatctgcct gcctcagcct   240
cctgaagtgt tgagattaca ggcgtagacc accgtgccca gcctaagctg gcatgtttta   300
aggcagttac atctctaact tgatttacca gctatgcttg agggccaag gagccaaaat   360
tgcagccaaa ctgatcttaa aggaccaggg aatagaatgg tcaancatgt ttccaaagtt   420
taacctaagc ctggcacatc cttgccnatt gctcaaatg caatnaaggg caactaaatg   480
gaaaagaata caggaagacc catttgggng gacacttggt gaaaacacan ccgtnnna   538

```

<210> 6463

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6463

```

atTTTTattg tttttgagat ggagtctgc cctgtcacct aggctggagt gcagtggcgc   60
gatcttggct cactgcaagc tctgcctcct gggttcatgc cattctcctg cctcagcctc   120
ccaagtagct gggactacag gcacctgcca ccacaccagg ctaattttgt ttttgtattt   180
ttagtagaga cggggtttca ccatgttact tttaaagtgc tataaatatg cttttaaaat   240
tcatagtagt cttggacagt atacaaagtt tgacttagtg ggggtataaa tttaaaaaat   300
acgaaaacaa gggaaacaac caccatgtcc aacatgaaag gagtacctta gttaatatga   360
tccaccaata cagtggaata ccacgaggtc atgaaaatat tagtgaaaga tatgaatatt   420
tgtgatataa aattaaataa aatgtgaaag acaaaattat gtgtaaacta caattgcact   480
atTTTTacaa ggnaccccat gaggattaag acnccgaaga tccatgcaaa aaaaaaanta   540

```

cttgggttaaa tggnggaaac cgggaatttt tnttt

575

<210> 6464

<211> 581

<212> DNA

<213> Homo sapiens

<400> 6464

ggtagagatg gggctctcgct atgttagtaa ggatcttaag attaaatcat ctggctctatc 60
caggtgggct ctaaattccaa tgacagtgtc ctcataatga aagatgtaca aaggagagac 120
agagaagaaa aggcagtgtg accacagaag cagaaactgg agcggtagga agagaaaaag 180
aacagactct cccctacagc ctcccaaggt ggcactaccc ctactgccat ctcaatttca 240
gacttctggc ctcctgaact gtgcagaata aatttctcgt tttatgtcac caaatttggg 300
gtactttgtt acagcagcct aagaaactac tacatcactg aaatacaggc tttattcacc 360
tcctccacgg aagcaggtga gagtaaaggc gaattagcct ttgaaagttc cttgcaaagc 420
aggaaaatgt tcaattctgt gacacaggaa ctaaaagctg ttcccgttag gaagtggcag 480
aatgtacaga gacaggctac ttgcttttgc cacaagttcc aggnntnact tgganccttt 540
gcacttgggt attgactttc atttggattt ttttttaagn c 581

<210> 6465

<211> 559

<212> DNA

<213> Homo sapiens

<400> 6465

gacagaagcc ttgctctntt gcccaggctn gagtgcagcc tctgnctncc ggnttnaagc 60
gattctcctt cctnagcctc ccgagtagct gggattacag acatgctcca ccacgtccag 120
ctaatttttt tatttttttg tagagacggg gtttcacat gttggccagg ctggctctga 180
actcctgac ttaagnatc cgccctgcctc ggcctcctaa agtgctggat tatagcccac 240

ccaatcctat ttttttaaaa tgctgtccat taatgcattc tgacttcttg cttgaaaacc 300
 cctggtttag tggataagca cctgtaactc caggaagatt caggattaag ggcagaaata 360
 atgaagtaaa ttgaagtatt agcattagna tttccatta cattttggaa tccgctat 420
 tgatgtattc acgacggta aaataattta acatgcttaa tgnatggatt aacttgggca 480
 attncatttt naaaatataa atggaataac gnatctgant ctaaggtaga catgtgttac 540
 cagaatttca accncnttt 559

<210> 6466

<211> 575

<212> DNA

<213> Homo sapiens

<400> 6466

aaatcaagga acattgtctt ggcttttttt ttttttttt ttttttgnca ttgcttttct 60
 cttttctttc cttttttttt tttaaagaga ccattccact ttattataac atctggatgc 120
 ataaggactc atgtaaagca gtcatacncc attatcatta aaacccatat ggnaaaatac 180
 atacacagtc caacaaaagg ctaatacata gtaaagccta agcatactac tatgtaatat 240
 tataatacat aacttggaga ctttagtttag agtactatgt tatctattca gttttgaaaa 300
 cattcattaa gattttaaat gcaaattcat tccttatttg gaataaaaca aagtcctcta 360
 agttataaca agtattggtc ataagttttc agacctattc attaaattca aagaacccaa 420
 agaattctgn gatgtccagt agaagtatgt aataaaaaca ttgcatatgg ttctaggggg 480
 gagggcttta gcaattggtt actggagtna aatgcaacnt taatctttnn aaatccagaa 540
 ccgaaggggg tttcttcttt tggccaattg ggaaa 575

<210> 6467

<211> 579

<212> DNA

<213> Homo sapiens

<400> 6467

ctatgtatag tcagtttagga ctttggcaaa tataaagcac aaccaatata ctgatgtagg	60
gtggaaaata atttaaaaaa ttaatttagt aaaatgcctg gagcagtaag taacaattat	120
taacaatata acaatgaagc tgtctgtact ttcatttaac aacacactta aggcaaagt	180
tgaattaata taaaaataat atgtggtaaa ctgatacttg acatgataca ataaaattaa	240
ttttcacgtt gaagacctag ttatgacaac atctctacat gccttctaaa tacctaattt	300
ctcagttgtg cagagcatag ctcactatgg cctaataaga tgtcaatcag aatatccaga	360
atattttctta atatagagca atacatttcc cctaccacat caggcaaaat aatttaatat	420
atttatittc acaaaaggct catctaactt caaactatag gggtttttaa aattctagga	480
ctaattctga tcttaaagat gctatcattg gtantctaaa attcatgcng gtcttaaaag	540
ggccaaatgc ttatccggga ggtttaccct aattanccc	579

<210> 6468

<211> 576

<212> DNA

<213> Homo sapiens

<400> 6468

gagacagggt ctcccctgtc acccaggctg ggggtgcagtg gtgtgaccat agctcaatgc	60
agccttgaac tcctggactc aaacagtcct cctgcctcag cctcccaagt agctaggact	120
agagacgtgt gctagcacac ctggcttata ttttattttg tntagagaca gggctcttgc	180
atgtggccca gggtaatctc aaactccttg gttcaagtga tcctcttgcc tcagcctccc	240
aaagtgcctg aattacaggc aaagtctctt gaattatagg aggttggtgg ggcctttcac	300
cacgtaggca gcccaaagat ctgcctcgtg gatcactatc ttgggatgta tggttgatt	360
tcttgatga aaggagagg ataagagtat acaaaaatct ttcttaaaat aaaattaatc	420
tgatgtaaag caaacatgaa tgagtttcaa aacgtgaatg cccaaagtta ttcataaggta	480
atttagactt aacaggtggg tttctatcaa ggggntttac catcctaaaa ttataagttt	540
tccaattatg ccnattgga angtaenttc ccagcn	576

<210> 6469

<211> 545

<212> DNA

<213> Homo sapiens

<400> 6469

```
cttcagtata agcaccttcc cccatcatta cctacagcat tcacacacag atgtgaaatt 60
gtttcatttc tgacccagat tctggctttg agtattaagt ctttccaaac tccatatttc 120
ttcatatttc actaggaaga ttataaactt atctgaaatg gcagaaattc attttgcttt 180
caatttctca ttctgctgta tactgccgaa aaggggtaca taatgagaag tgagagcagc 240
agcctggcct gctgcccagc tggaagcagg aagttcacct gataaggact tgatgcttca 300
aattctaaaa actggaaagg gagctagaag tgggggaagg aagatctgga aacatgcccc 360
ggggtagtaa tgaagaaagt gaattcagcc tgagggtggg accttctgcc cagcctctgt 420
caacttgatg cctcgttatc ttctccatct tcctaacccc anggcagtaa atttaaggag 480
caaggtggna aaagccncta anaaagccan ggcaggataa aaaccttttt gagggngnaa 540
gtttt 545
```

<210> 6470

<211> 497

<212> DNA

<213> Homo sapiens

<400> 6470

```
caggcacctc caaacatatt ttctttattt cctccagaga acaggcttta gtactgaggt 60
ccttgtaaac atttaacaaa actggtttta gaacaaacta aaagcatcta tacccttgcc 120
ctgtgttgct ggggtgagtt tatacaagga gaagttggaa caaatgcagt gggcacaatg 180
accttcttac tcagttcaaa gtaggtcttg ggatgagagt tccacacggc cagtacagct 240
gactttctgt gatttccaag gggngcccaa gacattaaac gccatgggtcc ttgggaagga 300
ctgatgatgt ttctgctcat tgntgatcag ggtcaaacct ttactaac cgggactgct 360
```

ctttccaaga agtcagaggt cagaaagctg gtaaccgtcg taaaagacc cgtnttgaca 420
gcatgtgtag anctgnttct tccatggggn taccttggca canggtcaca agcagncccc 480
atgggcttan gggccta 497

<210> 6471

<211> 510

<212> DNA

<213> Homo sapiens

<400> 6471

gagacagtct cgctctgtca cccaggctgg aatgcagtgg tatggtctcg gctcactgca 60
acctctacct cccagggttca agtgattctc ctgcctgagc ctcccagagta gctgggagtg 120
caggtgagag gtgacaacgt gctagcagcc ctgcctcact ctcgngcct ctttggcatt 180
ggcgccact ctggccacgc tcaaggagcc cttcagctcg cagctgccgc tgtgggggtc 240
cctctctggg gctggctgag gccggagctg gttccctctg attgcgggga ggtgtggagg 300
gaaagggtgtg ggcaggagcc agggctgtgc gcacacacgg gttctaggtg agcgtgggct 360
cancaagtgc ctgctgggct tgatcagggg atgagctccc tctgggtggc tggagtggcc 420
aagctaggtg ctgcaaagtc ccatgggnagt gcccntnaaa aaaaccggnt ngactttttc 480
tanccatggg gactttgggg acctttntgg 510

<210> 6472

<211> 580

<212> DNA

<213> Homo sapiens

<400> 6472

aaaaaaaaa caaaacacat agacaagtaa tgcaaacaaa gtaagagcaa gacttgtgca 60
gcagctcttt tgaggacaat caggaggtgt ctggggggcc cttcccacta gagggcactg 120
gaccctgtcc ctgcatcttc agtcgtctct actgccacat gccctgtcca caccaggatg 180

acccctcccc accccagccc tatgactctg gaaagctctt cagcacacat aacaggatcc 240
 agacagaact tggaccttct ctgctggagc aaattggaat tcctgaaatt gattgaaccc 300
 tccatacaga gggagctcag tccgcatctc ctcggtttaa ggccctgcct caaatagggg 360
 ttctgatccc tcaggaaagc aagggtctga gacacagaca cacctgacct gagggactct 420
 aagggaagt gtggaggtgc caggaactat gaacaatgag caaaacatgt cttgccacca 480
 tnacactaca tgcttttcaa catttctatt tattaccaa ctggtttgac cttgnttaca 540
 aggttnngaa aaactggaat ctaaaatttt tccgtactt 580

<210> 6473

<211> 604

<212> DNA

<213> Homo sapiens

<400> 6473

aattatttca aattttattg nagattcaag gggcagtga tgtacaggtt tgtttcatgg 60
 tgtactggga tgatgccgag gtttgggaca caaaagttcc catcacctgg tagtgaggat 120
 aacaacagtt tttttcaacc ctttcccctt ctttcccct cccagtagtc cccagtgtct 180
 actgttgcct ctttatgtcc ataggtactc aatgtttagc tcccacttat caatgagaac 240
 atgtggtatt tggttttctg ttcctgtgtt aactcactta ggatactggc cttcagttgc 300
 atctatgttg ctgcaaagga catgattttg ttcttcttac ggctgtgtag tattccacgg 360
 caacacattc tatcagtaaa atttataata aacgtatgca cacacaaaca cacaccctg 420
 ttccacccca caccctctt cacaagttgg ttgttaaaca tttcctagca cactaccaat 480
 tccctacatt tgccactatt attggtatta tcattaataa ataaactgna taatggttaa 540
 caggttacca agcatcctt acaacaagcc ttggttaaag gngttantaa cttactttgc 600
 tgag 604

<210> 6474

<211> 600

<212> DNA

<213> Homo sapiens

<400> 6474

```

agacagagtc ccattctgtc acccaggctg gagtacagtg gagcaatctc agctcactgc 60
aaactccacc tcctgggttc aagcagttct catatctcag cctcctgagt agatgggatt 120
acaagcatga gccaaaacac atggctaatt tttgtatfff ttaatagaga cgaggtttta 180
ccatgctgcc caggctggtc tcaaattcct ggcctcaagt gatcctcctg cctcagcctc 240
ccaaagtgct gggattacag gcttgagcca ctgtgtccag cccatatttg attttaacgt 300
cctgtcctga aatatgcctg gaacagagca gtactcaata aatgtctgta gaatgagtaa 360
gtgtcacct gcatcccatg cctgtcttta atcctcaca ggtctgtatt agtatctcag 420
ttggcaaata aagaaactaa ggcttatctt gtactggcta attatgtgat ttcagtcaca 480
caattaaaga atgacagaga tgatttgtga actcangctg gcttgaccct aaaccctggg 540
ctcttttact acatcagcct tctttactgg atggaaccaa cctaattttg aatttgaant 600

```

<210> 6475

<211> 577

<212> DNA

<213> Homo sapiens

<400> 6475

```

cttctaaaca aaaggggggt acatacacag aatgtgcagg tttgtcacac aggtatacat 60
gtgccttggg ggtttgctgt acctattgag tggctcctta agttccctcc cctcaccccc 120
aacctccaa caggccctgg tgtgagttag tcctctctct gtgttcatgc attctcaatg 180
ttcaactccc acttatgagt gagaacatgt ggggtttggg tttctcttcc tatgtaagtg 240
tgctgagggt gatggcttcc agcttcatcc atgtccctgc aaaagacatg atctcattcc 300
tttttatggc tgcatagtat tccatgggtg atatgtacca cattttcttt tcctttttta 360
ttatacttta agttctggga tacaagtgca gaatgtgcag gtttggttaca taggtatata 420
tgtgccatgg tggtttgctg caccatttac cacattttct ttatccagng tatcattgat 480
ggcatttggg ttggttccac aanccttgct attacaaatg ggctgcaata aacatcatgn 540

```

gcctggatct ttttngaang attaatatnc cttnggn

577

<210> 6476

<211> 572

<212> DNA

<213> Homo sapiens

<400> 6476

```
aggatatagg ttttctggtt tatTTTTgaa agcaaaaagc atatttaaag gttaactaaa 60
aacgtactgg atttacaaaa aagaaaaatg atatgtctga ataggagtca ttattttaag 120
actaaaaaaaa gagaatcaaa tgaagaaatg ctggaaaatt ggaatcactt ccaaattgct 180
ctatttaatt ttaccataag cataatagtg ggtgaagttc agctaaagat aggggcatga 240
aaaaaatgtg atttgggtatt gctctttagg gaggcaaatt aattacaaat taagaccatc 300
tgggttaaag aatgaattgt caccttttaa gaaccaggaa taaaggtaaa tgttcacttt 360
aaaacaaagg gagaaagaac atgagaaaaa tcaagagtaa atccgtacaa tattacatac 420
acacaaattg ggggaaataa acattggcat ggaaatgccn caaaataaaa tacctatgga 480
atgtaaaatc acctntggtc cctgaatatt gancccaagn ttttggggaa agntnaattc 540
ctggattctt tccaggcctt gggganggaa nt 572
```

<210> 6477

<211> 598

<212> DNA

<213> Homo sapiens

<400> 6477

```
cacttaaadc cattgttagt gacaatgtaa gtgtttaaac agtattgctt taggaatctc 60
agaagttcaa gtagaaagac atattccata ttctgggaaa agacggtaca aagacttta 120
gaatttaatt ttttaaaagt ttcagtaact accttcagtt accttcagtt aactacctac 180
ctactcatac ttttcaacaa actgggaaaa aagtcttctc taaaatcagc atctacttgg 240
```

cagatgtatg tcatcattgt gtctctcatt gtttcacct taaaaatgtg taatactttt 300
aattgcagag gtaataaaag atattttattt gaaaaaata aagtgattat ctacttcttt 360
cctgaggcac acagactttc agatttttatt tatgcacgaa agcattttaa aatgaggtaa 420
tatatatact ctttcaccta ctttcacggt gtttactttt ctatgtcaaa acatacaaag 480
ttagatcatt accttgnatg tattgctatt taaagtatct tcattggtag ataaataccc 540
agtgggtcct ttngnttgct attcctaagt aaacttgggg ggattngatc ctagttnc 598

<210> 6478

<211> 354

<212> DNA

<213> Homo sapiens

<400> 6478

gagatggagt cttgctgngt tgcccaggct ggagtgcagt ggcgcaatat tggctcactg 60
caacctccgc ctcccaggtt caagtgattc tctgcctca ncctcctgag aagctgggac 120
tacaggcacg cgccaccacg cccagctaata ttttgtattt ttagtagaga tggggtttca 180
ccatgttgac caggatggtc tcgatctctt gaccttgtga tctgcctgcc tcancctccc 240
aaaatgttgg gattacaggc atgagccacc gncctggcc cactagctct agnttttatn 300
acacatngnc acctcanata ttcataaagg ttanatgttg caaaataata aact 354

<210> 6479

<211> 589

<212> DNA

<213> Homo sapiens

<400> 6479

gagatggagt ttcactcttg ttgcccaggc tggagtgcaa tggcgcgac tcagctcact 60
acaacctttg cctcccgggt tcaagcgatt ctctgcctc ggcctcccga gtagctggga 120
tcgcaggcat gcaccaccac acccggttaa ttttgtattt tcagtagaga cggagtttct 180

ccatatttgt caggctgac tcgaactccc gacctcaggt gatgtgcctg cctcagcctc 240
 ccaaagtgcc gggattacag gcatgagcca ctgtgcctgg ccaggtgaac tattaaataa 300
 tagaaagcac ctgcaccatc ttctgtctgc ttgaattttc ttacattta caaaaatatt 360
 tttgatataa gaaaacaaaa aatttaacac aatagaaata tagtcaaacg atagaattcc 420
 tcgacatata ccaattttat ggtaaaaaaa aaaaaaagca atgttaacaa ctggttctac 480
 aaatgtttta aacttcatat aggccangtt tggcagctca tacttagaat ctcagaactt 540
 ttganaggct nangtgggan gatcactggn aactgggagt taangacca 589

<210> 6480

<211> 586

<212> DNA

<213> Homo sapiens

<400> 6480

aaatacaaat gttttattac gcaaaccaca tgtaggtccc aggctcagga gtcacagggg 60
 tctgcacagt cttttctgct gtggaacacg tgatagatgc tggtcggggg gaacatagca 120
 acagcgccga gcagagagcc cacctggatg gccacgccgg ctgccagcaa tgccggccgg 180
 ccccgccat gcagcaggga gctggctgcc accttcacgt aggagaacac gccaagacac 240
 agcaccacg acagcaccac gaggacgacc cccgccgagg tgcccaccag gggcgggcag 300
 gggctcagga ctgccagcgc catcaggtag cccccacaga acacgccag cagagagagg 360
 ccgccagccc tgcaaggacc tgcacagcac acccatggcc aggaagcagg ccaggggatt 420
 ggcagcactg cccagcacca caagcaggtg gtaggccaga ccccgtagg gtaagcagga 480
 aaaagttttg accggangca agnacccat tgggcaaacg ccttggtggc gggcaacagg 540
 nccaacange angcacttgn ggcttgatan aacttgatag gcctta 586

<210> 6481

<211> 588

<212> DNA

<213> Homo sapiens

<400> 6481

```

gtttgttttt gagacgcagt ctgctctgt tgcccaggct ggagtgcagt ggcgcaatct 60
tggctcactg caacctccac ctctgggtt aaaacaattc tcctgcctca gcctcctgcg 120
tagctgggac tacaggcatg tgccaccacg ctgagctaata tttgtattt tttagtagag 180
acaaggtttc accatgttgg ccaggatgtt ctgatttct tgacttcatg atctgcctgc 240
cttggcctcc caaagtgtg ggattacagc tgtgagccac tgtgcccagc cctacattga 300
ctgattttca aatgctgcct tatattccaa gcctaaatcc actcggtcat gacttggtat 360
tatttttatt attgcctaata tcaatgtact aatattttgt gaaggatttc tgcattctatg 420
ttcctaagag acatttgtct gcagttttct ttactgnac taactttgnc tggttgggaa 480
ccaggataat gctggcttac aaaacgaagt tgggaaatgt gnetctcttt tggtttttga 540
aaagactttc ngaatgaggc attttttcnc aatgnttgcn naaaatnt 588

```

<210> 6482

<211> 537

<212> DNA

<213> Homo sapiens

<400> 6482

```

agaagtcaca gcagttatcg tttattgagc actttctata tgctgggcac tttgccatgc 60
gcattacaac tttttgaaa tacttctatc ccctactcct ccctccttaa taaccgaggg 120
gtgccgctgc gtccaggag gtcaagttct tgcccaggat cacacagccg ggaacacaca 180
ttccaaaacc cacgggttta accgcgaaaa cccgtttgct ccttcctcag ctccccattt 240
aaataacgtt ttaactttat tcagcaggtt tgctcatctc ccacccaat cgtgactccc 300
cagaccgggt ctccacaggg accaagaggc ctctccctnc cccttcgccg cgggagcagg 360
gaagggcctt cggcagcaac ttgttccacc tccaaggtt cagacgctaa actgagttcc 420
agaaggaagg gcttacgcaa aggcncccag cgcgccagaa gangggtgtc tttccgtgc 480
ccgggccaag cccggggcca gtccggaccg tgggcggna cacttggaact ngngcng 537

```

<210> 6483

<211> 591

<212> DNA

<213> Homo sapiens

<400> 6483

```

gagacagagt ctggctctgt caccagggt ggagtgcagt cccatgatct cggctcactg 60
caactccacc tcccagggtc aagcgattct cctgcctcag cctcctgagt agctaggatt 120
acaggcaact gccacatgc ccagctaatt tttgtatct ttagtagaga tggggtttcg 180
ccatgctggc caaaccagcc tcgaactccg gacctcaggt gatccacca cttcggcctc 240
ccaaagtgtt gggattacag gtgtgagcca ccacaccgg cccctttatc ttttgattcc 300
tgaaaacaat gcacttaact tcagtatttg gtcttttagt tataattctt aaaaataaga 360
cattttaaaa catattaaat gtgcattatt tggaaaaaag tatatgcaa tgaacctgga 420
aatatcaata tacaaccaa tttttcaatt ctgagtcctt ggaggggaga tctcatgnat 480
ttgacatttg aaaaccattt ttttagcaac tatgatagng ggttctaaac ttggccttaa 540
cacaagccat ttttctatat gacatgacat accaaggatt atntttgctc c 591

```

<210> 6484

<211> 550

<212> DNA

<213> Homo sapiens

<400> 6484

```

gagatggagt ctcgctctgt tgcccagggt ggagcgcagt ggcgcaatct cggctcactg 60
caagctccgc ctcctgggtt caatgttggt aatattctta atgcatttca ttatttatat 120
acaatatgat actgatgagg agtcattata ttctgagtag ttttctgaa gaccacaagt 180
ctcaagtcaa ggaaagtatc cttaatctag gggaaaaaaa ggaagtttct aaattgttcc 240
acaatacact tcactaagaa ttgtactgta tgacaatgtt aatttttaaa aataatatat 300
atatatatat ttgtttctgt taaggatggt ggtatttgct taatactggt tttcctgtat 360

```

agcagatatt ttcttatggc tatatttact tgaatgaaaa attaaagatg actacctgaa 420
tattccagtg tataattcng gtacaacctc atgaaatggg ttgattctgt ggtctcaagt 480
ctagaatcca gaattgctgg ccaatctgna aattattcag aacaaataag gccnttnncc 540
cccngggggnn 550

<210> 6485

<211> 550

<212> DNA

<213> Homo sapiens

<400> 6485

agacagagta ttgctctgtc gcccaggctg gaggtcagtg gcgcgatctc ggctcactgc 60
aagctccgcc tcccgggttc atgccatcct cctgcctcag cctcccagat agctgggact 120
acaggcgcac gccgccacac ccagctatct ttttgtatct ttagtagaga cagggtttca 180
ccatgttagc caggatggtc ttgatctctt gaccttgtga tccgcccgcc taggcctccc 240
aaagtgctgg gattacaggt gtgagccacc gcgcccggcc ctgttagata cttttttaaa 300
aacaacagtt tgcttttaac tataaacatt aaaccctccc aaaagaataa aaatgcatag 360
tcagtagttt aaatgtcttt attaatagct ataattaaat cttttttcaa aatatcagtc 420
caacataact ccaatcatat ctatcacact gatgggagga aaaatgacaa ctacccaaag 480
ntttnccatt actggataat ttgnncnaaa gattccaatt gngagaaagc anaagttcng 540
gaagagaatt 550

<210> 6486

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6486

gtgaaacatt tctcaaggca ggatgagcag ccacctcctc tgcgtttcca cagggccccc 60

ggcggagcta tictagcact tgccacctac actgccattg tcaattaact tgtccccctg 120
 gactggggga gtcctgagat caggggctgc acctaacca tcattgtggc tccagcatct 180
 ggcacatagt ggggtgccag taaatgtggg tttggcagat gaatgaatga cacgtgtctc 240
 tctagtggct ctatggtgca cctgagctcc acgaagtctt cttcataaca gaggacaggc 300
 tgtgctgagc acctcctgga tgtgcgagcc agtgagtgtg ggtggggcag anagcgtgga 360
 gcatgagaag gcacatggga agtgggagtg ggagcatgca tacattttaa ccacacatgc 420
 gggcaagttc acagactgcc ttggaatgag ccaaatagaga ctgatccaac ctggtnatgc 480
 ctaaaagggg gaagtgnngn cattccccat ggccaaaaag gtnccaaana nccttgtcca 540
 aacagggtt ggaaaaacaa cn 562

<210> 6487

<211> 618

<212> DNA

<213> Homo sapiens

<400> 6487

gagatgcagt ctgcctttgt tgtccaggct ggagtgcagt ggcatgatct ctgctcaccg 60
 caagctccgc ctcccgggtt cagccattc tcctgcctca gcctcctgag tagctgggac 120
 tacagggtgcc cgctaccacg cccggctaata tttttgtat ttttaataga gacgggggtt 180
 cactatgtta gccaggatgg tcttgatctc ctgaccttgt gatccacctg cctcggcctc 240
 ccaaagtgtc gggattacag gcgtgagcca ccgcgcctgg cccacaaaat tatcttttaa 300
 gaaggtaaaa tgaatctttc tagaatacta cttaatatta agtcatttct tggctcaata 360
 atctacagtg gcattccagg atgggtagga ttaaggctac cacataattg ttagactata 420
 acctacttcc tgaaatgtaa attgtaactc catgtgcagg ttgacaaatg ctgaagtggg 480
 tgatgggtag ttagaggctc attgggctat tctctctact tttgtcaaaa tccactataa 540
 aatattttaa aagcaatata caggatttaa gttggccatg ctttctttgg aacctgggtt 600
 ggggtanatg tggaaaaa 618

<210> 6488

<211> 617

<212> DNA

<213> Homo sapiens

<400> 6488

```

aacacaagc ctctgacca cagtgattca tggggagagc ttagagagct ccatgctact   60
ggtaacttcc cttcactttg actaaagtga ctaacatctc tctacctgac ctcaactgtcc  120
catgcagaga ccacgtgttg ttgatagaag attgtaccaa aggaataatt catagaacaa  180
caaggaagaa ttaagctaac aacagattcc aaaatgttat tcaagaaatg agacaaaagg  240
aaggaatagc tgctatcacc tttgttgagt gttacttcca tgacgatcct gtccttgggc  300
ccaggggtct tccgaccag ggatgaagaa ctgccttcat cggaacctcc cgccgaggct  360
ccccactgg tattgaagtt cggggaggcg gatctgctca tgtgtgtggg tgtcgagcag  420
ggtgtgaggc tggggctcac caactttgtg cgtaccgtta aaacaaataa tccactccgg  480
atttgcctgag aaaacagtga ggaaagggtg gctgaaacat ttggaatgcc ttatatcaaa  540
gggttaaaaa aaaaaaccac tnaccaaacc caaccagaag gaaataagaa aggaaattgg  600
ataanggaga tcattna                                                    617

```

<210> 6489

<211> 617

<212> DNA

<213> Homo sapiens

<400> 6489

```

gtaagcgtca aacgtggcag ggtcaacact gtataaacat tcagtcact tcccatagag   60
ggcacagagc ttctttttgc ttttatcttg aatgtagcct tcaactttgt gtaattcctt  120
acaaaaaagg ccacatggct taaaattcaa cacacatttg tccccagcct tgtggtttat  180
aatttcaca ttgccgtact gttcgatcca cagtttacc acaatgatat tatgcacaca  240
gcagggtggga tttgtccatg tatatgcctc atttgtttca aggagctcca aggtgatgg  300
tcctttgggt tctgttcta cactcttccc ccagaatttc agtttgggat agatagagcc  360

```

atgaaagatg aagtcattgt ttaatccttc agcatgaaat gcactgattg gtgggtgatg 420
 gctgacctgt tcggagatga gtctaaatcc aaggtcatct cgcactaatt cataagtctc 480
 tcccagcagt gggttgaaag gttttccagt ccgttccac tgagaagcaa cagcagatac 540
 agcaaacgca gctacacact ggattenttt cacaggatcc gagagtgaac tggncctggg 600
 gataaggtaa gatgctc 617

<210> 6490

<211> 612

<212> DNA

<213> Homo sapiens

<400> 6490

gtagagacgg ggggtggggc tcctgctgtt gctgaggctg gtcttgaact cctaggctca 60
 ggtgatacctt ccgcctctgt ctcccaaatt gctgggatta caggcatgag tcaccatgcc 120
 tggccagcaa caatttgtgt ttgagaatt aacctgagcc atttcctgaa gctacctaca 180
 ctgccattcc acagttggga atatcttcac gtatctaccg gctagggaag aatctggggg 240
 cagaaatcac cttattccag agcagcaatt tagacgacgt agtaggagtt tgtagggaga 300
 tgtaaacat aaggaatttt cctattaaaa tgagatgaaa aaggggaatc cctctgactt 360
 ccacgattat aggcattcagt gaccaaattt taacctggaa aaggcattca tggatcagtt 420
 catgctcctg ggcagaattc aatattgaac atgattccta gctattgatt tggatatctgt 480
 tctgcagaaa tgtttgaatt tctcaaactc aatccaaagc cattgcctga acagcttcct 540
 atgtcagaga ctaagcncag atgggttcca tcaaccacac gtgaccataa tgnntttcac 600
 aggtcacagg aa 612

<210> 6491

<211> 608

<212> DNA

<213> Homo sapiens

<400> 6491

```

atTTTTtatt ttttattttt tattttgaga cagggtctcc ttctgtcatc caggctagag   60
tgcagtagct ttttcttggg ctatgtaatc cagaccagga aaaagccctt tacagccagt  120
gtggcatggg ccagggcagc tctagctgac gttcaccaag gggagatcct actttgctat  180
ggtagggagg atttgggata gacatttgca gcctgcactt ctagggaacc tagtggatga  240
gtgactaggg agatgacagc catggctcag atggaacata gtcctgccta cgggcactgg  300
ttgggaaaat gggttttagga agcctgggag gctggaaggc tctagggtgg ggctgcacag  360
gctctgggta tcctatctcg ggccttctcc agggcatgtg ttgctcagga tcctagccct  420
ggcttatccc tcctcaaggg agttaataaa gtggaaagaa atgtggctct tgccaagagc  480
ccctggcagc ttancaaagc ccattgnctg ngctgtgtcc agtgcccttg atttganct  540
ggtttgggtc cagcccaaat cagccctttc attgccagct tttccacttg cacttgnacc  600
aaagcctg                                     608

```

<210> 6492

<211> 553

<212> DNA

<213> Homo sapiens

<400> 6492

```

gttgagatct gaagtttatt ttgctgtgca actccttttt tggagtttta cttgcttcca   60
acaaggaagg caaatTTTcc tgcgtccatg atgatggaag gcaggtaaact ctttctgga  120
gtttgagctc gtttccagca gggaagatga gtttcagttt tttcctgctt tgtttttgtt  180
gttgttgttg ttgctgtttg tttctgtttc ttgttgtttt catctttttc ccattggggt  240
tgaccaactc tatccaactt gatcaaatcc gaaggaaaat tccaaattat ggagaacaag  300
acctctgaat tggctaaatt cctgcaacct gctctgtcta ggcaagaaga aataaatctg  360
gttaaaagat ttaacaaaca tgatccaaaa gccaaaggcaa gtataataat taatagtgga  420
ctggccagag gaaggagatg tgagccccaa attagcattt tgactangcg ccccatgact  480
nanacagctg tggcatatct tatgggccaa tcggctagtt ttttgggggn gaccttact  540
aannccgttg ggg                                     553

```

<210> 6493

<211> 556

<212> DNA

<213> Homo sapiens

<400> 6493

```

acaatataat ctgttttatt ttacacttct ctgattattg aaatctaaat agaggttttt 60
gctaacaaac aaaaaggaaa ataaaaagac agcaaggaca cgattaaatg ttgagtgcag 120
atgaagggtt gtatgaggcc ccatacctggg gaggctgtac accttcttgg cacagcagca 180
gtgtggccca cggagcttga acctggtgaa gacagcaagt aagccacagc tcaagagttc 240
tgaggcttgg gaacagaaaa gagctccttc ctgctccacc ccaatctggg ttgcatgggc 300
atggaaaaga gcaaacacac cctgcaaagc atactggaca tgcctcttct ttaccttctc 360
aggccagaac accctcctct ccacaaacgt gtgcacactt gcacgctcat taagcatgtg 420
cacacatcat attcacacac tcaagccatg ctcttgattt cagggtctta ttgcangctc 480
aggtatcaac cccagaacn angtgtgtga aaactccta gcagactnac aaaaagntac 540
tgkanaagca cggggt 556

```

<210> 6494

<211> 552

<212> DNA

<213> Homo sapiens

<400> 6494

```

ccgatctaag atggtttaat gtcttgacaa aaagtgaat gacttataca ttttacattt 60
tgtacattta gatcaccata tgtatagatg ttctaagtct gaatccttgg tcttcagtat 120
ctcatagtgc tggatgctcg gaagtatgac aaaaacttgt aacacagact aaccacaaag 180
taccagatat ttcttgccat ttgtgatctt gcaataaaaa tgcgccagat gaggatcaca 240
aggatagtat taaaaccata acgtatatcc cgcaacttgt tcagatgttt tctggctgca 300

```

gggaggccag acatttcttc attcaatacg tacttcttag ttcccaagca gtagttctct 360
 atatattctg cccaatgtaa ctgccgtaca tcaatattga aggtcttttt atcttcaggg 420
 ttttaagttga ttcattaaca tattgacatt ctcaggtatt ncaaccaag aattacttgg 480
 gaaatattca agaaacacca tagctttggt gaaaaccaag ttattggttt catcatcctg 540
 nattggaaga aa 552

<210> 6495

<211> 558

<212> DNA

<213> Homo sapiens

<400> 6495

acactctaca ctctattctt tattctggta cagctcagca tggatttcag ctctactac 60
 aaccgggtac acatcctggg ggtgagcaca cagcaaaacg ggggtgggacg tgcagagagg 120
 tatagggtaa aggagttgc tgggtaccag accaagagct ggttggaaac agcacctgcc 180
 actatgggtca gtccttcca ggcgtctcca atcaggcagg ctgaagagag ggtgcacctg 240
 tctgtgcagg gcacctcttg caggatgcac cctactacag ggcatatag caccactgag 300
 ttgtggccca gggccaaggc tatatttccc tcaagccagc gtgcatccca aatccagtca 360
 gacatgttcc acaggccaga gcgccaaagc tcccagaagt ggccctgtcc ccagctaatt 420
 ttcacaactc ggagtccctt gcttccaaac acagccacca tggcctcaag tcaaggtctc 480
 cattaaggct tctggncgta cccggaacca tgggtaanat agtggggccan cagggtctgn 540
 actcgcttta tnatnccn 558

<210> 6496

<211> 556

<212> DNA

<213> Homo sapiens

<400> 6496

gcatcaaatg ctggttttga aaatgtaatt aagataaaca aacagtagaa aatacataat 60
 ggagtgcata ctggaatata gttacttagt tttcgaaaat gaaaactaag ggttttactc 120
 aacactttat aaagtagatt gtctttttca acccaaattt ttgtgaaatg agactttcaa 180
 agtcagaaat tccaatttta aaaatattaa actaagaaaa tccttaaatg aaactaataa 240
 aaagtcatga aatatagcta tacaaattgc cttgtgaaac atcatcacat ttctctaaaa 300
 ataattctat ctctctctaaa aataattcta tcttatggat ttgggaaaaa aaatctaaga 360
 gtaaacaatca aaaattagtt ctcagctgta aactgattag agagggaaaa tcagttcgaa 420
 ttaatatatga ggatgaaaat gttgattata ccgttgagaa aacgagtgtc ttggnccctg 480
 gatctctaag ctgnatttca tcagaagtct gccccagntt tcactttgna aaanggntgg 540
 cctttgacac accccc 556

<210> 6497

<211> 559

<212> DNA

<213> Homo sapiens

<400> 6497

attgntaata atttgaagat gtttattgca ttctattttt ggtgggaaaa aaatgtaaca 60
 tacatttatt tagcacgaca ttgtgaaata cacaaaacat gtaactgaga aagcaggaat 120
 tttctattcc tagtccattt ctgaggacta aatcatgaac tgctcccaat gtaattaaat 180
 atttcttaca atagttgggc accaagttaa agatttatta attttcccct ctcagtatag 240
 gcagcaattc accattttct ttcagttcct tcacaatatc caatcctccc accagctccc 300
 ctttcacata cagctgaggg tatgttggcc aatttgagta agcttttaat ccttgccgaa 360
 cttcttcate ctccaatata tcgaatgttt catattcaac accagtacta tttagtattt 420
 ccagaatttg tttgctgaat ccacatttig cttcctgttt ggttcctttc ataaagagca 480
 tcacagaagc tttatttgtc agcactttga gcctttcctc taatttggga gctttnngac 540
 aaatggatct aggtcttca 559

<210> 6498

<211> 567

<212> DNA

<213> Homo sapiens

<400> 6498

```

aaaggcaggg gactctcaag aaaatgatga atattattat ttcittgaat tcttgaaatc 60
aacataaagt tgtgtgattc ctctcctcct accccaatt ttagcataac tggtagtaat 120
ataaaagaac tagctctttg ctaactgtgc ataagaaata attttttccc cagaaatcag 180
aatgaagac aagtgccaca catcattgat cgccccaaca tggattttcg cacaaaagaa 240
atacagctac ccagtatgca gtttacctga ctgggagaaa aactgggatc gtcgccaaga 300
gttctgaact ctaagcgga cactggcagt gccaggcgac tctagatcag atggcagaac 360
agaacaaaca gaaaaccatg aaaactgggg tgagaactga atagaaccat gctcccaagt 420
actatagga gtttnggctt ctagtcaaat nccagaaatt gagaagtcag taaaatctac 480
nggtccaaaa atgtcttaat aacccaent tttaaaaacc tggaaggaca ttgttccaaa 540
atcaacngga acccggaacng gtttttn 567

```

<210> 6499

<211> 555

<212> DNA

<213> Homo sapiens

<400> 6499

```

gaaagctgaa aatttatttc actaatatac ataagaagtt cacaacaatg aacagacaga 60
aatagcagt atatacagaa ttctactact tacagtacat tacaatagag aaagcatttt 120
ataaacagtt cagtattgga ttaaaatctt ttaaggatgg ctaattctat tacctaatta 180
aattctatac ccattattca aggtttaatg caaatctcgc ctcacaaatg aaattttctt 240
attttcctgg tccaaattga actcctcttt ctctaagctt gtacagactg tattctgtcc 300
aaataaatta ccaataaatt aggtattgct ttatattact gattaattca tccatagata 360
ttattagatt ttaatcctag tctctcctac gagatagtta agattctttc acagctccag 420

```


tccatctccc atgcaaatta aattaacaaa tgcatacagt atatacatct gttcacttga 480
aatcttttgg aggccaagta gtcaacaaan ggaaggcata ttacatagtt tgactatgca 540
ctccgcaaaa caaat 555

<210> 6500

<211> 554

<212> DNA

<213> Homo sapiens

<400> 6500

gaagtcggtt agcactttat ctgcaccgct cctgtggtac taacactcac caccttttat 60
tacagttatt tgtatcttct gggggttctg acttagaagc attcgctcat gatcccttga 120
gaggtttatg actgaatgcc taatttatct ctgagtcctc taccttgcac tttaccttgc 180
acatacaggc cttcggcaaa tgtttgctga atgcttggat taatgaatac acttctgaac 240
ccaccaaga gggcgccagc agggacgtgc ccttcccggg tgcctaattg gacgtgttt 300
ctcaacagga cccccatca tctccagcac ccagaccag cacgccctcc acggcgagaa 360
gggccagatc aagtgttca tccggagcac gccgccgccg gaccgcatcg tgagtgtctc 420
agggacggcg ggcgggggcc gggccagcaa gcccgacagt cacttttgcc aatacctggg 480
tggccagcca ggcngtgcac accttcgang gtnccttttt ttgntgnggg aaaatttacc 540
nggccttggt gggt 554

<210> 6501

<211> 545

<212> DNA

<213> Homo sapiens

<400> 6501

gagatggagt ctgcctctgt taccaggcc ggaatgcaat ggcacagtct tggctcactg 60
caacctctgc ctcccgggtt caggcgattc tcctgtctca gcctcccag tagctggaat 120

cacaggcgcc cgccaccatg cccagctaata tttcgcat ttagtagaga cgggggtttca 180
 ccatgttggc caggctgac tcgaactcct gacctcaggt gatccacccg cctcggcctc 240
 ccatagtgtt gggattacag gcgtgaggca ccgcatccgg ccaagactcc ttaggtctta 300
 gagcaatcta aatgatcaat aatgccccctt gaatgtgtca gtatcaataa gtctctgatt 360
 acacgcacag agaataaaaa gtgtaacagg ctttagtgaa caagggttcc aggcaatttc 420
 tatgaaggcc caatacctac aataacctag taacagcaga tccaatgttc acagaaaaac 480
 nattaaataa ttcccactgn actggggaaa cttggcttaa cagcaaacct tctnccaatt 540
 gtttt 545

<210> 6502

<211> 412

<212> DNA

<213> Homo sapiens

<400> 6502

atatatattc attgacctct gcctttactt ttattattta cttccatacg ttttactgtt 60
 gttgttttaa aattttaata cctggctctc ttactagctt tttagagtga acactcagtg 120
 taactaattt ttggccttct tgattttata tcaatatatt catggctttt aactgctccc 180
 tagatccgtt tcaataggta aggctctaag cattgaattt tcttccttct agcttctaag 240
 agtagttttc tattcccaa cacaatgtcat tctacttgtc ttctaatacct tgatttcttt 300
 ctttttttgg cattgtggtc agagaatatt tgtataaatg attatgatta ttggatttc 360
 aaaaagattt acttaaaaat ccttgtggac aggtacataa ctacatttta tg 412

<210> 6503

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6503

ccagtttctt ttgcatttat tgcaagaaag ttaggtatgt ttgacaatac acatttttga 60
 agtacatact ggttataaac aatgtattcc ttacatatta taactacata tacaagtatg 120
 gttttttaaat gatgaaatcc aattgtaatt aatctatagg gaaagcaatt caagaaaatt 180
 cgggataactt aaatgttcag cttttttaga tgtgcaagag gactcctatg agacactttt 240
 cagtatatga aatattacta taacccttga atgatttaca tgcaaggatt tattttattt 300
 gggacagact aaattgcctg aagataatgc catggcttct cccagtgatc cctgagtttc 360
 ttttcttctt cttttttttt ccccatagtt tactgctgtg cttaggttct gattgatgac 420
 acactcacgt aaggcactta tttacaaggt atggacttaa aacnggaatc acagcatttc 480
 tgcgaaagcc cttaaactnt tcatctatgg ttggctgggt cangacnttt taaataggca 540
 nggtcancat ggaaaattan ct 562

<210> 6504

<211> 552

<212> DNA

<213> Homo sapiens

<400> 6504

ctctctcttc ttccttctt cttttttct tttttcttt ctttcttctt tccttcttct 60
 tttctttctc tgtctctctc tccctccac cctccctctc tctctctctc tctctttctt 120
 tctttttttt gaggcagagt ttcattcttg ttgccaggc tgcagtgcaa tggcgcgatc 180
 ttggctcacc gcaaccctg cctcctgggt tcatgagttc tcctgagtag ctgggattac 240
 aggcattgcg caccacggct ggctaatttt gtattcttag tagagacaga gtttctccat 300
 gttggctcagg ctggtctcga actcctgacc tcaggtgatc cgcctgcctc ggcctcccaa 360
 agtgctggga ttacaggcgt gagccaccac acccagccta gatttcagtg tttctaattt 420
 ttattcctca gaggcagata tgaatttttg acaaagtttt ggccaatttt ggatgtaact 480
 ggactttggg gaaaggacct tcttctntca atcactttta tcaggaataa ttatttaaca 540
 aattaatcca nc 552

<210> 6505

<211> 558

<212> DNA

<213> Homo sapiens

<400> 6505

```
acattatccc agaaaacaga ataaatggct ttatttggtg tcttcaagaa gcttctcctt 60
ccgtaggaga ttaggtgtt gtgggagaaa ctgtaactgg ttttcgtgta attctgtcta 120
gttctgcatg aacatctaag acaggcttct ggcctgactt tttggtggat ggtggtaaac 180
cactgcttcc acctccagcc ccacctgcag ggctaccacc actcacacca gggcctcctg 240
gagagccagt ctttttactc aacaaactgt tgaagaaatt tgccagaacg ccttcacttg 300
tagctccagc tttcatgttt ggatcaattt tttttgacct agcaggaatg ggtgacacgc 360
tggcaacatt agatgataca gatctatttg gtgttcgtgg ggagcctcct gggactcttg 420
gtgaggcatc cacaggcctt ccagctgcaa gttggtggtt gctttgctaa aagggactgt 480
agcttcataa gaaacacctg acatcttctg gcataaatc cttctcatgg ncaaactttc 540
gaacaggngg ntaanttt 558
```

<210> 6506

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6506

```
ggtttaatgg tataaaacac aaaggtttac agtgagcaaa gcaaatttct gagcagagac 60
ttctccaccc ccaagcccct cactaagggc agccagacct gttataaatg gaaggcacia 120
aatcaaactc atcccgacct agggaacaca gccactcca gggccaaacc tgcagagtcc 180
aagagtgaca gccagtcgtt ctggctccag gcaccacttc tccctgagcc cccaactccc 240
acgagcaatg ccgagttcag tggctaaaag aagcaacttc aggtttatct acggagaaaa 300
gcctttgcca cggctgcgga aggagcccgt tggccagagt gtgtggacat caacgttacg 360
cgaatggctg tgcgtgccaa tggctggtat aaggaacttt taaagtcctc aggttaaagt 420
```

aaaaactctt gtggagctct tcaactgcacg atcttggtat ggtttctacc ctggttaagg 480
tctacctttt cccatttccc cacatttctt tacatcgctt ttatttactt caattgcaaa 540
tcccganctg gtttggtant tt 562

<210> 6507

<211> 562

<212> DNA

<213> Homo sapiens

<400> 6507

ctctctctct ctctctcgt ctctctttct ttcttttttg gagtgttgct gcgatgccca 60
ggctggagtg caatggtgcg atcttggtt accgcaacct ccacttcctg ggctcgagca 120
attatcctgc ctcagcctcc tgagtagctg ggagtacagg cacactccat cacgcccagc 180
taatttttgt tttagtagag acagggtttc accatgttaa cccgactggc ctctaactcc 240
tgtcctcaag agatctgccc gccttggcct cccaaagtgt tgggatttcc ggcgtgagcc 300
actgtgccca gcctagaaat ttcttgaaga caggaattaa atttcataac tacttctcta 360
ccccaaaaag aacagcaggg ttactggtga gatataaatt tttcctattg ctattggatg 420
ataataagaa cgatgatgat tcaacccaac atgaaagaag gttggttngg atttccattt 480
taccacagca cttnaaggct ggattaaaaa agggctgctt ttnaagggtg gnaccctttt 540
aaaggggggn tttncaatcn aa 562

<210> 6508

<211> 563

<212> DNA

<213> Homo sapiens

<400> 6508

acagcataga gtaatttatt gcacacaaaa aaagaaaaga ctactttgaa aattaagtgc 60
agaatagacg gtacattctg agaaagagat tccagggcag gctgctcata agagtgagac 120

accattaatt gttactggag aaaccctcct tctgggggtt ttgcacgatt attcataaga 180
 aggtggaaag aagtgttagt gtaagcatgt tttgagtggc cttctgggtg cacatgtgca 240
 ctaactgtac atatttgtgc atacattgca tgtctcgta gcattttaag tctccaccta 300
 ggaatgtgtt ttactatta aaatgagcaa aagttcagtt tgaggacaga taaaatcaaa 360
 atgcacatgt tctctagaag taaaagtccc tactgaagat agcgggtttc aaacgacccc 420
 aagtgtcca catcttaaag gtcggctnca caaagctgga cactatctgc tncctgaggga 480
 tccgggtcca tttgggggtc tgagacctgc aagtcaggag tgacttgaga tganaccgtg 540
 attcaagggt aaatgcctaa tag 563

<210> 6509

<211> 553

<212> DNA

<213> Homo sapiens

<400> 6509

ccccatttaa aaatatctta cagnggcata actttccctg tacaaattgg gtttaagaaa 60
 caaaagggac aatngctaa tcaatgatga gcctttaatc caaccattat atatcccctt 120
 tccatcctta gatcccctga agagaccatt tagttaagac taccaacagg tgacaccctg 180
 acctccttac caaccttgcc ttttagaggt gaccagagac ctgtgctttt ccaaagtact 240
 gttatacgtg taattagat aatatcaatg tggggaaact ctacctttgg attttgagga 300
 ctctgctttt ctgaaaccc tctgggttag agactgttta ttcatatgca cctcagggaac 360
 ttgaggccaa gatgaagttc actgtttcct agtcctttgc ttgntctcct ggccattatg 420
 tttccacctt cattcaaaag ctttctcttt ggaagctgnt tataaccag caacaccatc 480
 aactcactgg gctactggcc tcaatcccat ttncagcac tttccctttt catgcaaatn 540
 atccaaaacc aac 553

<210> 6510

<211> 496

<212> DNA

<213> Homo sapiens

<400> 6510

```

gcaattttac agtaagtcac accattccaa actaaaaagc ttttgtgaaa aatcagtaca 60
cgaatacacc ggagtgtaat gtaactaaga gaccaccaga ccaagaaagc aaggcatcct 120
cccaggagaa tgagggtgcc ctggctgggc tgcctcact ccaaccgca gacctgcgga 180
gcatccaggg ggccgatact caggtgggct acccttggcc cctgcccag ggctccctca 240
ggcaggctgc ggccagcccc tgcggcagga ccacatcctg tcccattccc ctctccagca 300
ctaccacta tgattaagct ctcaaaccga gtacaccatg gtgtgtccac gggtagtct 360
acaggagggc agatganggc agggctgtct ggctaacc aa gtgtcactta gggaacacct 420
gtcggatgga ngcgt naggt gtcagatgct gagcccatcg ntggtcnaac tngcaaggt 480
ggggaanggt ctgnt 496

```

<210> 6511

<211> 542

<212> DNA

<213> Homo sapiens

<400> 6511

```

ccttatcact ttggttaa at gaatgactta ttttacaatg acctatgatc ctatttcacg 60
gtatcaagtc ttttaaacct ttgatatttt acaaactttc caaaatcaat ttataaattg 120
tcttttctcg acctaat aa tctttaaga tattaggtcc cctaaagtcc aaaaatgaca 180
taatttggct tatttggat aaaaattaga caggagcat tgtcaa at gaaatgatgt 240
ttggttttct ttgggctata tttgtataaa tgttattggt atgtgttcca aaatgatggg 300
aaactcctgt aattctgatt taacttagtg aacgttatca gtaattgtaa ttgtgntaaa 360
ttattgngtg ccacagaggt acacatttgt caattgggtc ttggattatg gctgncctaa 420
aattttggca tccatggaca atggtggcct gggtgggcct tttanggggt ctatatcact 480
atgggactna acaggggtct taaagccagt tctgaacctt gcaatgggcc ttgaataagg 540
gg 542

```

<210> 6512

<211> 528

<212> DNA

<213> Homo sapiens

<400> 6512

```
gagatggagt cttgctctgt cgcctaggct agagtgcagt agcgcaatct cggctcactg 60
caaactctgc ctcttgggtt caagtgattc tcctgcctca gaatctggag tagctgggat 120
tacaggcatg taccaccatg cctggctaata tttgtgtgtg tgtgtgtgtg tgtgtgtgtg 180
tgtgtgtgtg tgtgcgcgcg cgcgcacgcg cgtttgtgtt ttagtagaga caaggtttcg 240
ccatgttagc caggctggtc tggaactcct tacctcaggt gatctgcccc cttcggcct 300
cccaaagtgc taaaattaca ggggtgagcc actgtgccca gccggattat catttcaa 360
gtcattttcc agatggaact atgttaattt ggcatgtcaa caaacaagac cataagtaga 420
tccatcatgt tggaggattt taatgacatt taggatattc ttgccacaat aacatgcann 480
cagggcattt nctacanggn tctattatgg cnatgaataa actctgna 528
```

<210> 6513

<211> 553

<212> DNA

<213> Homo sapiens

<400> 6513

```
ccaattaaat cttttctttt tttttatgaa aaaagatcac acagaatttg ccaacaaaca 60
aaattccaaa agaaacataa aaaaaaaaaa ccaataattc ccccaaaaaa caaacccaaa 120
gtctggcttt tccttcctc aagattgtct ggttgaggcc ttggtttccc ttgaaggctt 180
ggggcctggt taagtgttt ctggggccca agcagggacc ctgggcttgg gccggctcct 240
gcctctccct cttctctccc taacaaacac ttctctatcc tgggggggtga gtacagtaca 300
cttggcgggg tgggcggggg gtgtgctggg gactgggagg ccggtgaagc cggtgctaga 360
```


cactataatc taacaggaaa taaaaaataa tattctgcac gtcagaatgt ttttttttta 420
 taattcatag ctatitttica cagttttaaa aagttatata tatattnaaa tatattaacc 480
 ttatataatnt aattaaaagg tgactccttt aaaggntatg atcagggccg ggccagtnnt 540
 tggacaataa acn 553

<210> 6514

<211> 500

<212> DNA

<213> Homo sapiens

<400> 6514

gttcagcttt tactggaaac tgctgtctag gaccacctgc cctaaccagg aataaaggca 60
 agacagcctg gagaccagtt tgtttcttca gctgcaaaca gctgcctggg caggcaggtg 120
 acacaaggcc tctgtcccca gggatgggac ctgcagggtc tgttcaccca gggcacccac 180
 agtcctgaag tgcaggccca gggctctgtcc agctgggaga gggcagaggt ggcggctggg 240
 tgagttgccg gcctcagctg ggggcctggg ggaggccctt cttcagcaga gatgtgagga 300
 agctccccag ctcctcgtcc tggtaggtcc aggagaccag cagcaccttg gtgcctgggt 360
 cctcanaagg ggcggcggcc tgganganga cggacttcac agtcacagaa ccgtctggga 420
 ngtgcttgca cacaatgggc ctttaggacg ctcttgangn ggcttgtna accncaatg 480
 gccgnttctg nttccttgcg 500

<210> 6515

<211> 551

<212> DNA

<213> Homo sapiens

<400> 6515

ccttgtctgc agtcatgagc ctattgaaaa aggcctacag aagtaaactt ttcaaggagg 60
 taataggag atgtatTTTT ttttaaagaa gtgcagttga tatctaattt acacagtga 120

actaatgata gaaaataact aatgaaaaaa aatcagagac tggtttccaa ttgattgaca 180
 cctagatctg tcagcctctc tttaaagaaag gggaaggaga aaaaaaatct catcatggaa 240
 ggcagacaag agtccacctg acagaggtgg aatctgatgg aatctgaccc catttcatga 300
 taaacgagag gaaacataaa tgccatctca aatactaaag cgatgtagtg tagcatgagt 360
 gactcaatgc aaattcacag aggaaaagaa gttcggctta ngaagtagga caataaatac 420
 aaatatttca tcttatttaa tggatcatga cttcagtga actccctttg caatgcaata 480
 aattttaaac accaaccttt attcttaacg gttttagcca ccgnttttgn gagagaaaac 540
 tccttccaac a 551

<210> 6516

<211> 548

<212> DNA

<213> Homo sapiens

<400> 6516

ggagggtgtc tcgctcggtt gccaggctg gaggcagtg gcgcaatttc ggctcactgc 60
 aagctctgcc tcccgggttc acgccattat cctgcctcag cctcccgagt agctgcgtct 120
 acaggcgccc gccaccacgc caggctaatt tttgtatatt ttagtagaga cagggttca 180
 tcatattagc caggatggtc tcgatctcct gacattgtga tctgcccgcc tcggcctccc 240
 aaagtgtctg gatcacaggc gtgagccacc gcaccgggcc gggttggctt tttaaataac 300
 agctctgtaa tgaagtactc ttgggtcaagt agatacagca ggatccaaaa ccagttaaata 360
 cactaactgt gaacatttga gcaaattatt taccctctct cggcctcagc ttccacatct 420
 ataaaatgag agcacaaatt attcacagct ttgaaaagt tactgntgag aatattacng 480
 tgnatttgn aaccagctgc ttatgccaaa agcctggcac aatagtaggn cntaaacaa 540
 nggttggg 548

<210> 6517

<211> 550

<212> DNA

<213> Homo sapiens

<400> 6517

```
gttttttgag acagggtaga gagtcttgct ctgttgccca ggcttgtctc aaacttctgg 60
ggtcattgtaa tcctcccacc tgagcctcct gagtcattggg attacaggcg tgagccacca 120
caccaggctt gaaggtaaatt ttaatggggg agtgggtacc tccatgccat tcacctaaa 180
accagtggaa gtgacttctc aatcccttgt ttggaatcat ccatgctagc ctgtgcctct 240
tctggtaggg atatttgaga atttcaaaca taaaagggtg tcctagactt tcttcacccc 300
caaaaaagta cccaacaagg ttagaaaaat acaagcaaag tcagtataat aaatacaaga 360
tgtgtccctt gggattcaac caacacacat tgtttcctag ccaaaggcag agggtagacc 420
accacctgga tgcttcgtct gnttactcag accctgctgn ttctttcacc ttgtggcttg 480
gatcccttca tggccaatta cccaatttgg gnacttaagg caanttatgc nntggatcaa 540
aanctttttt 550
```

<210> 6518

<211> 523

<212> DNA

<213> Homo sapiens

<400> 6518

```
gcattattta agtaaaaagc tttatttttt tccctcagtg tctgaatctt ctttattgnt 60
taccaggatt catgattcct ttgttaactt gttctcagtc atttattcag ttgagtaatt 120
acactttgtc agacaaatat ctaaagtttt attatgtaac ttgcagattt tcaggacgag 180
tgaaggagga aaatggcaga agagttcagg aaagacaaaa atgcaagact gngtctaagt 240
ttatgcctct cttgagtttg atgatccaat ttttaattta tcatttgagt atctcttagg 300
gattcttcct ccacagtgga ggaaagtggg ctctactgaa ttcatggaa caccgccttt 360
aaggagaaaag aaactttgac aatagacgct tttcaacaa ctactggcaa tggtttgaaa 420
ggtgtcattt gggtcagcta gataccaagg ctgaanagtg ctttctttnc aatgatccat 480
ggttactggc gcttttaaac ncattcctaa aacttagaaa ctt 523
```

<210> 6519

<211> 541

<212> DNA

<213> Homo sapiens

<400> 6519

```

ggtttttttg tttttttccc aacatcttgt atctttaata acatacacia tggttaccag 60
ccatattcat aacaaaagtt attcataaaa tgtatctaaa aataacattt tttttccttt 120
tcggtgtgaa aagcttgaga atgtcccagt tgggaagggtg gggttgagggg gaggagggcg 180
ttgaagaggg agaccctggc ttccccgcag tctgaacccc caaatcccct ccctccacct 240
gggccccaac acaaccctc attaggaata gggaccagac agtctgtcgg actctggggc 300
tgggacgaat ctctgggtta tgatatagtg ttccacttaa gtgaggtcat gacataatgg 360
gggaaggaaa aaggctgaaa gaaaaggag gggcttaggg aaaaacccaa aaaccaaaca 420
atcccccttc ccttattcct gactnccaag tctnaccaac cagacctggg aacgganaaa 480
ggtgtgtgtt cctggggaag gggaccttta ggnacagnan ttctgactta ctggntaccc 540
t 541

```

<210> 6520

<211> 548

<212> DNA

<213> Homo sapiens

<400> 6520

```

ggctgttaac attgttttat ttcctttata caaaaagtag aaatgacaga aaaaacactc 60
ttgacagaaa caataccact gacctgatct catgaaggag ctgagccaaa tctgcccaca 120
ttatggggaa agggaggttc aatcaacatt agcaaatact catgcaattg atgaaatata 180
aaatgggtatc agtggcttgg tgaatgtcct gtgggtaggg tgaatcaatc tactcttaaa 240
aaacatacat tttcccaatc atgcttttaa acggcatctt ttaaaaaaac aagttatata 300

```

tacagatatc accccaaaat gaatcttitta cagtctacta ctataaatTT aaggcatcct 360
 gatattctgt tcttctgctg gtgaggcatt ggtttcatgg ntctctttcc aaagangata 420
 gtccagaaat ttncataat ttncaaangg gatcagttag aggaaattta aaaaggggat 480
 taccaggaag aagtcttttg gctttgctta acaatgggcc ttaagcctgn aggattcttc 540
 attttctn 548

<210> 6521

<211> 532

<212> DNA

<213> Homo sapiens

<400> 6521

gaagtccgaa ggttgtcaaa ttcagaaaag tcatctttaa ttgtaccatt cagattactg 60
 aagagctcaa aggaccaga gacagacacg ggcttggtgg tggagactgc gcccacgcg 120
 tcagaagctc ttttccagc actggaggca ggctgctgtg aagctgcca ggggtccgag 180
 ttcttgggga cagattgtgc ggtggctcca gtgggcaccc cccatgggtc aatggaggca 240
 gctggcttgg taccaaacga tggccagggg tctgaagtac tcgcaggagc cgctggcccc 300
 cccaggggt tggctgtgtt agtggaggct gacgggcccc agggctctgc tttctgggcc 360
 cgcggggccc gagctgggga gagcatccat taaatccaac agcgtaatct gctgtgggaa 420
 aaaaccatgc tctttctttt ttgggaattt aactggggcc ctttggnttt ctttcaaggg 480
 catctgnaat ctganggcat taaccgnc t gaagngtct ttctggttaa nc 532

<210> 6522

<211> 540

<212> DNA

<213> Homo sapiens

<400> 6522

gactggggaa gtccttctgc attaattaca ataagtaata ctcatgaaa actttcctta 60

tttacacaca gttgaacagt tattctaaga aaccattttc ccaccctatt taatattgac 120
 agattttcttc agttagaaac aaaaactcaa aacacacgca atcctaaaga actcatctat 180
 gtccccctta tctccccca tcttatgtag tccctaaaac agggcttgct gccctttctt 240
 cttcttgccct tttcagcaga tgagtcaagg ttgcagaggt ggcagtcaac catagagtca 300
 cagagtttga ttttcttcca tccatcaggt cgtagaagct gccactgagc ctgacaagag 360
 ttggtactca aaaatgcaga atgaattagt ttgaatgagg tgattaagga ttaatgagta 420
 gtggttaagg aaacaaagac cattagtga tgggggaaat attgctggat tactggtgga 480
 agcnggatct nttaaaaaac ntntnagnagg cntttcctac ntacctttta aggggtcctc 540

<210> 6523

<211> 523

<212> DNA

<213> Homo sapiens

<400> 6523

gcatatataa ataacattta ttaacttagg ctgtacaata tattgattta gtcaaataaa 60
 aaataaccgta cacaaaaatt gaagtaaaat ctgtaagatg ccattcagac tgaattttat 120
 attctgaata agacaaggga ctgccattca cttaaagcaa aatgggtcca attccgttta 180
 tctatctatc tatctatcta tctatctatc catctatcta tctatctatc tataagtctc 240
 gctctgtcac ccaggctgga gtatctatct atttatttat gagataagtc tcgctctgtc 300
 acccaggctg gagtgcggtg gtgcaatctc ggctcactgc aacctctgcc tcccacgctc 360
 aagcgatgct cctgtcccag cctaccgagg agctgggatac acaggcatgc accatcacac 420
 ctggccaatt tttggatttt taggagaaaa nggggttcac catggtggnc aagctnggct 480
 tgagcttctg acctaggggn tcnccccact tnggcttcen aag 523

<210> 6524

<211> 526

<212> DNA

<213> Homo sapiens

<400> 6524

```

aaggatttcc aactaggttt tattttagtt tccaatatta tgagcaatga tacaggagta 60
actcaagcaa atacatcacc ttaaatacat cagagaaaac tcactgtgtc agcacgtctt 120
gcgctccagc aaatgaacat aaaaacaaca atgtcagcag cattaaagtg cttttggcca 180
tacttttttc agaaagggtc tcccgggtga cgtcaacttg ctgacacaga tgagcaaagg 240
tcccagacag ttctgtctgg acttggtggc tgcagttgga gccagtgtag ctgatgacaa 300
gctgcagctt ctcgttgga tgctccacaa actggcgctt gaaggccctc tccttggcct 360
tggtggtcca ggtcagacgc tcatagacgt agaggaggcc atagagccca aaggagaggg 420
caatgagccc gncagcccac tggctttcac accacttctt caacaacaag aatgnccatg 480
ganggccctg gatgtcaagg angncnaggc cggtaacnt tgggaa 526

```

<210> 6525

<211> 541

<212> DNA

<213> Homo sapiens

<400> 6525

```

gagatggagt ctcactctgt cgcccaggct agagtgcagt ggcgcgatgt cggctcactg 60
caagcttggc ctcccaggtt cacaccattc tcctgcctca gcctcccgtg tagctgggac 120
tacaggtgcc caccaccagc cccggctaata ttttatatt ttttagtaca gacagggttt 180
cactgtgtca gccaggatgg tctcaatttc ctgacctgt gatccgcca cctcggcctc 240
ccaaagtgtc gagattacag gtgtgagcca ccgcgccagg cctccttctg ccattttaca 300
aatatgaacc tagcacagta ggtcctcaat gagagtctgt tgaattactg aatgattata 360
atgctgnntc tagtttctc acagttctga tcccttctc ctaaatacac tccaatttgg 420
ctttattctc tcaaaatcaa atggagcaaa atctatagta aggattatga ttatttaaac 480
cccaaattct aattcctttt cagnctcttg aactttttca aatccatggt tgggaagggt 540
n 541

```

<210> 6526

<211> 470

<212> DNA

<213> Homo sapiens

<400> 6526

```
cctcctataa atattttctt tttatttggg tttagaagtt gcaatttttag gtactattaa 60
cagaaaatac ataacaaaag cttcctaaca agtgaaaaaa ataattataa atgctggaaa 120
aattggcctc attaacatat ttacagactt ttacttaata catacgctt tggaaattaa 180
ttatctgaca tttatacaag catcaaaatt tccaaatcac tgagtagtga gcacttcagt 240
tctttattgt ctatacccaa atttgaaagt catttagttt ctgaaagtag aaatgacaag 300
taacagaaat ggtcaatctg agatactatt gacatattgt tctgttcctt cgcctaaagg 360
tgcttctgtt gagtaagtgt ccttatgctt tcttttctct ttgctctgan cttcctgnag 420
cttcagaatt atgtttcgga ttnccttctt ttnggnccca ttcttgnggg 470
```

<210> 6527

<211> 564

<212> DNA

<213> Homo sapiens

<400> 6527

```
agagtgtcaa acatatttta ttaaataattt ggaagctatt ttattgaaat tagagcatct 60
taaaactcaa tggcttcaaa tactagcttt ctgaggaaaa ctaacaagtt agcattaaaa 120
tatttctaag aaagagaaat ttctattttc atttggccta atatcttaac agcaggcagt 180
taaagatcat tacaaataga ttttttctct ccagaagcag ggtagtattg gacatcccct 240
ggttactttt tctttccttt cttttttttt ctgtgtgtca ggagctgggg tcatcttttc 300
tgtctccagc ttcattggctg cttcctgagc agccagagtt tccagcttta ggcgctcagc 360
ttccagcaat ttgnttctgt actcttcccg gatgtcgaaa attttctgtc gggcttcac 420
taaggagtcc tgcatttctt tatcatatnc aggacttnat cctttaactt caaccgntct 480
```